

**瑞澤電子**在電子零件產業領域已有數十年經驗,坐落在桃園市 中壢區,研發製造各項電子開關、連接器及其精密模具的開發、 設計,為專業電子零組件的製造商及通路商。

瑞澤電子提供世界級的研發能力及製程技術給全球的客戶,我們 將顧客滿意度為優先,以良好的服務、優良的品質、準確、快速 的交貨時程及創新的研發能力滿足客戶需求,不斷強化專業的技 術服務及提供優化的電子零組件方案,也代理各大廠牌電子零件 產品,共同開發國際市場,提供客戶更多元的選擇。

瑞澤電子以永續經營為目標,並將企業經營成果回饋給社會,善 盡企業應盡之社會責任。 Horustech Electronics Co.,Ltd. has the experience in the field of electronic components industry more than 10 years. Our parent company-Lizard Precision Industrial Co., Ltd was Founded in Apr. 2003 located in Bade district, Taoyuan City, Taiwan and specializes in research and development, manufacturing of precision tooling for various electronic components.

In order to offer further services to customers, global sales headquarter-Horustech Electronics Co., Ltd. was established in Feb. 2011 located in Zhongli, Taiwan which is a professional manufacturer and distributor of various electronic switches, connectors, variable potentiometer and related components can be widely applied to household, communication, automobile, electronic & medical equipment and other electronic applications.

Horustech Electronics Co., Ltd. is responsible to expand continuously our product lines to provide a complete solution and rapid delivery schedule, best quality and service, Innovative and technical capability for our customers to fulfill the fast changing market's demand, we also expect to be one of global and best suppliers for electric components.

#### Line Cards





## Switch

LED Tact Switch	L01
Tact Switch	T01
DIP Switch	D01
Slide Switch	<b>S</b> 01
Rotary Switch	R01
Push Switch	P01
Micro Switch	M01
Rocker Switch	———— K01
Detector Switch	E01
Intrusion Switch	IO1

## Connector

SD Card	C01
Micro SD Card	C02
SIM Card	C03
LAN	C04
HDMI	C05
USB	C06
Micro USB	C07
DC Jack	C08
Phone Jack	C09
Туре с	C10

## LED Tact Switch

Series	APTLV01	APTLH01
Apprance	i 🖗 🗐	<b>F</b>
Dimension	7.2 x 6.2	7.2 x 6.2
Features	Full Color	Full Color
Page	L01~L02	L01~L02

## Tact Switch

Series	TAVPGM03	TAVPGP01	TAVPDP01	TAVPDM04	TAHPDP10
Apprance			<b>*</b>	چ.	-
Dimension	12.0 x 12.0 x H	12.0 x 12.0 x H	6.0 x 6.0 x H	6.0 x 6.0 x H	6.0 x 6.0 x H
Features	Wide	Wide	Standard	Standard	Standard
Page	T01~T02	T03~T04	T05~T06	T07~T08	T09~T10
Series	TAHPDP11	TAHPDP19	TAVPCM01 TAVPCP02	TAHPCP03	TAVPEP07
Apprance			<b>*</b>	*	
Dimension	6.0 x 6.0 x H	6.0 x 6.0 x H	4.5 x 4.5 x H	4.5 x 4.5 x H	6.2 x 6.2 x H
Features	Bracket	Standard	Sub-Miniature	Sub-Miniature	Miniature
Page	T11~T12	T13~T14	T15~T16	T17~T18	T19~T20
Series	TAVPEM05	TAVPEJ10 TAVPEM11	TAVPEU01 TAVPEF02	TAVPDU21	TAHPDM03
Apprance			~		
Dimension	6.2 x 6.2 x H	6.2 x 6.2 x H	6.2 x 6.2 x H	6.0 x 6.0 x 5.0	6.2 x 6.2 x H
Features	Miniature	Miniature	Miniature	Long Travel	Side Push
Page	T21~T22	T23~T24	T25~T26	T27~T28	T29~T30
Series	TAVPCF19 / TAVPCU18 TAVPCM16	TAVPCM15 TAVPCU11	TAVPBP06 / TAVPBF09 TAVPBU10	TAVPBF18 TAVPBU19	TAVPBF22
Apprance	<b>\$</b>	$\bigcirc$			
Dimension	5.0 x 5.0 x 1.5	5.0 x 5.0 x 0.8	6.0 x 3.7 x 4.3	6.0 x 3.7 x 2.5	6.0 x 3.7 x 2.6
Features	Ultra Subminiature	Ultra Subminiature	Standard 2 Pin	Miniature 2 Pin	Normal Close
Page	T31~T32	T33~T34	T35~T36	T37~T38	T39~T40

## Tact Switch

Series	TAHPBM02 TAHPAM04	TAHPAM21 TAHPAM31	TAHPAM16 TAHPAM161	TAHPAM12	TAVPAU10 TAVPAF11
Apprance					
Dimension	7.0 x 3.5 x 3.5	4.6 x 3.5 x 1.8	6.1 x 3.5	4.5 x 3.3	3.2 x 4.2 x 2.5
Features	Side Push	Tiny Side Push	Midmount	Reflow_RA	Sub-miniature
Page	T41~T42	T43~T44	T45~T46	T47~T48	T49~T50
Series	TAHPAU13 / TAHPAF14 TAVPAU23 / TAVPAF24	TAHPAU08 / TAHPAF09 TAVPAU07 / TAVPAF06	TAHPAF01 TAVPAF02	TAVPAF03	TAHPBF26
Apprance	<b>\$</b>				
Dimension	4.7 x 3.5	3.9 x 2.9	3.5 x 3.0	3.3 x 3.3 x 1.5	6.0 x 4.0 x 1.8
Features	Mini Type	Mini Type	Mini Type	Mini Type	Sub-miniature
Page	T51~T52	T53~T54	T55~T56	T57~T58	T59~T60
Series	TAHP73	TAHPBP07 TAHPBP04	TAVPJP15	TAVPJP13	TAVPJM17
Apprance		No. Contraction of the second			
Dimension	7.3 x 8.0 x 9.6	7.5 x 6.0	12.0 x 12.0 x 6.5	6.0 x 6.0 x 4.3	6.0 x 6.0 x 4.3
Features	Double Stem	Standard 2 Pin	Waterproof	Waterproof	Waterproof
Page	T61~T62	T63~T64	T65~T66	T67~T68	T69~T70
Series	TAVPCU13	TAVPCM09	TAVPAU22	TAVPAU19	TAVPAU25
Apprance	$\diamond$	Ŷ	$\diamond$	۲	
Dimension	4.8 x 4.8 x 0.55	4.5 x 4.5 x 0.55	3.7 x 3.7 x 0.35	3.0 x 2.7 x 0.4	3.0 x 2.0 x 0.7
Features	Thin Type	Thin Type	Thin Type	Thin Type	Thin Type
Page	T71~T72	T73~T74	T75~T76	T77~T78	T79~T80
Series	TAVPH01				
Apprance					

AppranceImage: Constraint of the sector of the

## **DIP** Switch

Series	ADPS	ADPA	ADPP(L)	AIPCS	AIPCP
Apprance	0 H 9	<b>*</b>	4444444 12345678	NAME OF COLUMN	
Dimension	Box Type_2.54 pitch	Box Type_2.54 pitch	Box Type_2.54 pitch	IC Type_2.54 pitch	IC Type_2.54 pitch
Features	Top Actuated	Side Actuated	Piano Type	Top Actuated	Piano Type
Page	D01~D02	D03~D04	D05~D06	D07~D08	D09~D10
Series	AIPCH				
Apprance					
Dimension	IC Type_1.27 pitch				

## Slide Switch

Top Actuated

D11~D12

Features

Page

Series	APS35	APHM14	APVM14	APS47
Apprance		Sand Sand	S. Star	
Dimension	9.0 x 3.5 x 3.5	1.4mm Height	1.4mm Height	4.7 mm Height
Features	1P2T, 2P2T	1P2T, 1P3T	2P2T	1P2T, 1P3T, 1P4T
Page	S01~S02	S03~S04	S05~S06	S07~S08

## Rotary Switch

Series	RSH / RSC	RSF
Apprance		
Dimension	7.2 x 7.2	10 x 10
Features	4, 10, 16 Detents	10, 16 Detents
Page	R01~R02	R03~R04

## Push Switch

Series	APPS85	APPS80	APPS70	APPS58
Apprance				
Dimension	8.5 x 8.5	8.0 x 8.0	7.0 x 7.0	5.8 x 5.8
Features	Through Hole_VA	Through Hole_VA	Through Hole_VA	Through Hole / Reflow
Page	P01~P02	P03~P04	P05~P06	P07~P08

## Micro Switch

Series	MASPV01	MASPV02	MASPV03	MASPV04
Apprance				
Dimension	12.5 x 5.8	27.9 x 10.2	19.8 x 6.6	8.6 x 4.8
Features	Sub-Minitaure	Basic	. Minitaure	Ultra Sub-Minitaure
Page	M01~M02	M03~M04	M05~M06	M07~M08

## Rocker Switch

Series	ARPSH01	ARPSH02	ARPSH03	ARPSH04	ARPSH05
Apprance		Los			
Dimension	19.0 x 13.0	30.0 x 11.0	Ø20.0	21.0 x 15.0	15.0 x 10.4
Features	6A to 10A	16A to 20A	. 6A to 10A	6A to 10A	3A
Page	K01~K02	K03~K04	K05~K06	K07~K08	K09~K10
Series	ARPSH06				

Apprance	
Dimension	32.0 x 25.0
Features	16A to 20A
Page	K11~K12

## Detector Switch

Series	DAEPV01	DAEPV02	DAEPH01
Apprance		Ŷ	No.
Dimension	3.5 x 2.8	4.8 x 3.7	8.4 x 4.8
Features	Top Actuated	Top Actuated	Side Actuated
Page	E01~E02	E03~E04	E05~E06

#### APTLH01 / APTLV01 Series 6.0\*6.0mm Tact LED Switch, Through/Reflow



- Full Color Switch
- Multiple options of force
- Customized CAP options
- RoHS Compliant





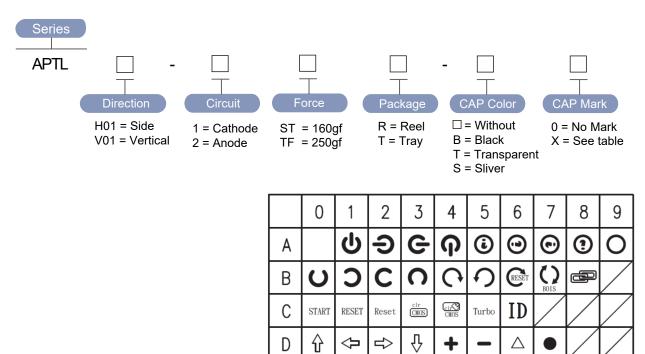
#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	Nylon	Nylon	Nylon	Stainless Steel Ag plated	Brass Ag plated

#### Specification

Operating Force	160, 250gf
Actuator Travel	0.20 ± 0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	300,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max

#### Part Number



#### APTLH01 / APTLV01 Series 6.0\*6.0mm Tact LED Switch, Through/Reflow

NO.	Dimens	Circuit	
APTLH01			
APTLV01			

#### Horustech TAVPGP01 Series 12.0\*12.0mm Tact Switch, Through Hole, Top actuator



#### Product Features

- Large operational stem
- · Multiple options of stems & force
- · Multiple color of stem
- · Boss at bottom for better positioning
- · RoHS Compliant



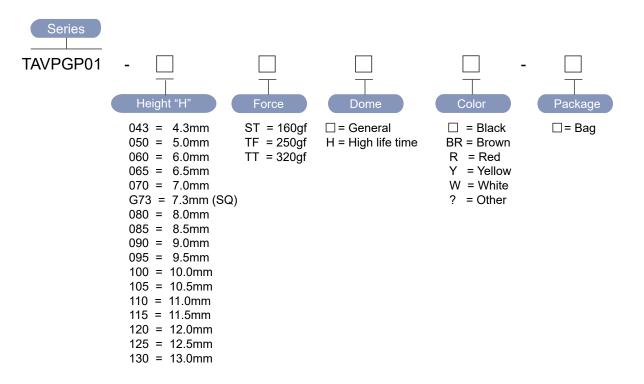
#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA66	Iron	PA66	Phosphor Bronze Ag plated	Brass Ag plated

#### Specification

Operating Force	160, 250, 320gf
Actuator Travel	0.35 ± 0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	□ = 200,000 , H = 1,000,000 times
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max





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NO.	Dimensions	Circuit
TAVPGP01		
TAVPGP01-G73		

#### Horustech TAVPGM03 Series 12.0\*12.0mm Tact Switch, Reflow, Top actuator

#### Product Features

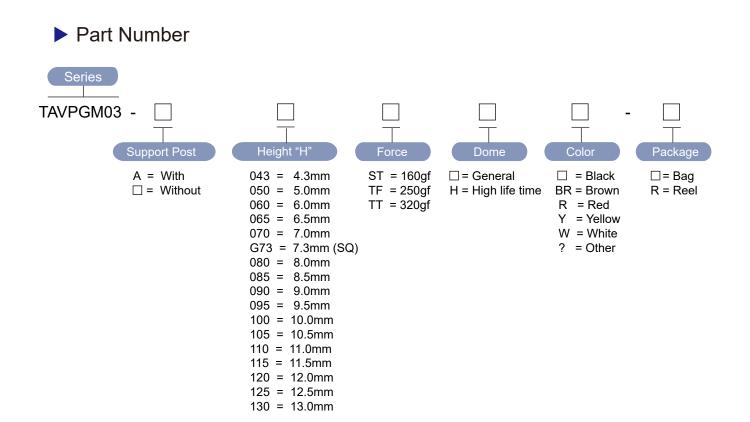
- · Large operational stem
- · Multiple options of stems & force
- · Multiple color of stem
- · Boss at bottom for better positioning
- RoHS Compliant

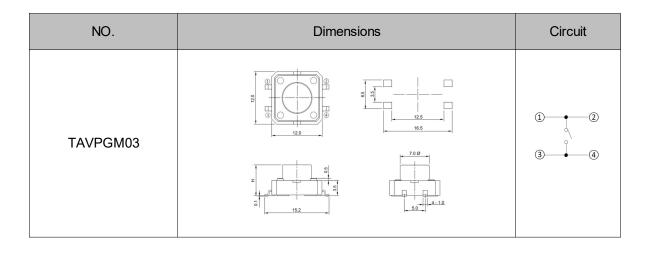


#### Materials

P	Part Name	Base	Cover	Stem	Contact	Terminal
	Material	PA6T	Iron	PA6T	Phosphor Bronze Ag plated	Brass Ag plated

Operating Force	160, 250, 320gf
Actuator Travel	0.35 ± 0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	□ = 200,000 , H = 1,000,000 times
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max





## HorustechTAVPDP01Series6.0\*6.0mm Tact Switch, Through hole, Top actuator

#### Product Features

- · Multiple options of stems & force
- Multiple color of stem
- Snap-in terminal
- RoHS Compliant

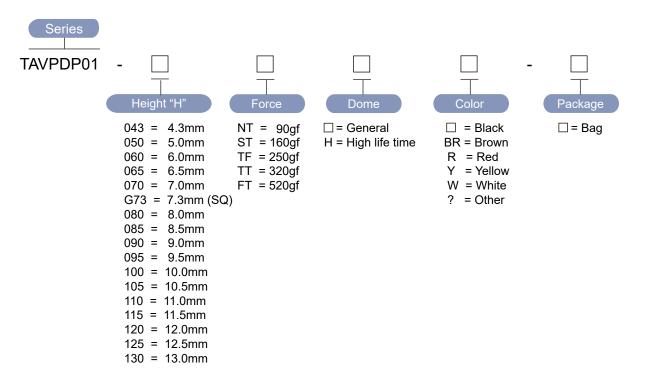


#### Materials

Part	t Name	Base	Cover	Stem	Contact	Terminal
Ma	aterial	PA66	Iron	PA66	Phosphor Bronze Ag plated	Brass Ag plated

Operating Force	90, 160, 250, 320, 520gf
Actuator Travel	0.25 ± 0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	□ = 200,000, H = 1,000,000 times
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max





NO.	Dimensions	Circuit
TAVPDP01		1 2 3 4
TAVPDP01-G73		1 2 3 4

## TAVPDM04Series6.0\*6.0mm Tact Switch, Reflow, Top actuator

#### Product Features

- · Multiple options of stems & force
- Multiple color of stem
- Great feeling
- RoHS Compliant



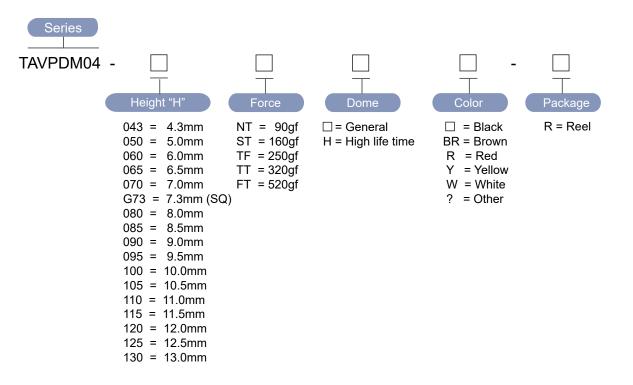
#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA6T	Iron	PA6T	Phosphor Bronze Ag plated	Brass Ag plated

#### Specification

Operating Force	90, 160, 250, 320, 520gf	
Actuator Travel	0.25 ± 0.1mm	
Operating Temperature Range	-20°C ~ 70°C	
Voltage Rating	50mA, 12VDC	
Actuation Life Cycle	□ = 200,000, H = 1,000,000 times	
Insulation Resistance	100 MΩ min @ 500VDC	
Dielectric Strength	250VAC for 1 minute	
Contact Resistance	100mΩ max	





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NO.	Dimensions	Circuit
		12
TAVPDM04		3
		12
TAVPDM04-G73		34

## HorustechTAHPDP10Series6.0\*6.0mm Tact Switch, Through hole, Side actuator

#### Product Features

- · Multiple options of stems & force
- Multiple color of stem
- Great feeling
- RoHS Compliant

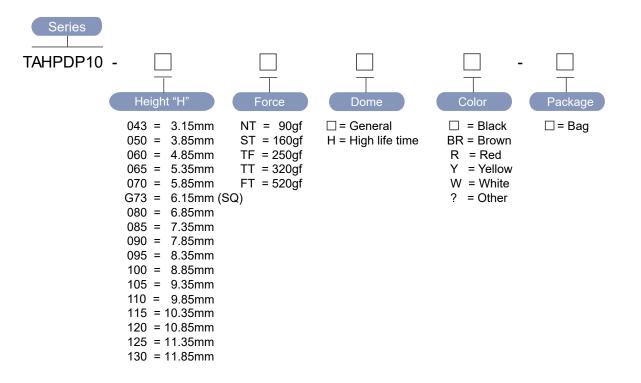


#### Materials

Part	Name	Base	Cover	Stem	Contact	Terminal
Ма	terial	PA6T	lron Cu.Sn plated	PA66	Phosphor Bronze Ag plated	Brass Ag plated

Operating Force	90, 160, 250, 320, 520gf
Actuator Travel	0.25 ± 0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	□ = 200,000, H = 1,000,000 times
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max





NO.	Dimensions	Circuit
TAHPDP10		10`∂2 34 
TAHPDP10-G73		()2 (32

## HorustechTAHPDP11Series6.0\*6.0mm Tact Switch, Through hole, Side actuator

#### Product Features

- · Multiple options of stems & force
- Multiple color of stem
- Snap-in terminal
- RoHS Compliant



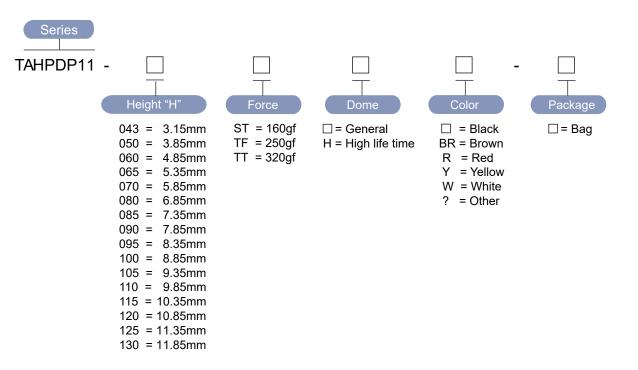
#### Materials

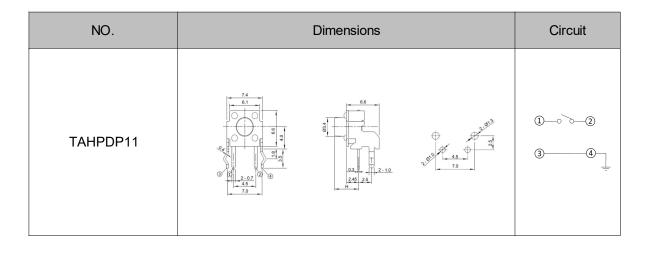
Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA6T	lron Cu.Sn plated	PA66	Phosphor Bronze Ag plated	Brass Ag plated

#### Specification

Operating Force	160, 250, 320gf
Actuator Travel	0.25 ± 0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	□ = 200,000, H = 1,000,000 times
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max

#### Part Number





#### Product Features

- · Multiple options of stems & force
- · Multiple color of stem
- · Great feeling
- · RoHS Compliant

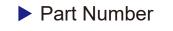


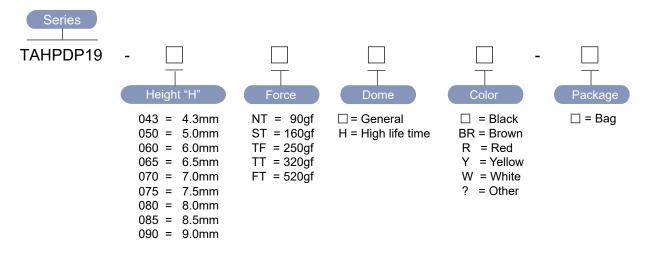
#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA6T	Iron CuSn plated	PA66	Phosphor Bronze Ag plated	Brass Ag plated

#### Specification

Operating Force	90, 160, 250, 320, 520gf
Actuator Travel	0.25 ± 0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	□ = 200,000, H = 1,000,000 times
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max





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NO.	Dimensions	Circuit
TAHPDP19		1 <u>~</u> 2 3 <u>_</u>



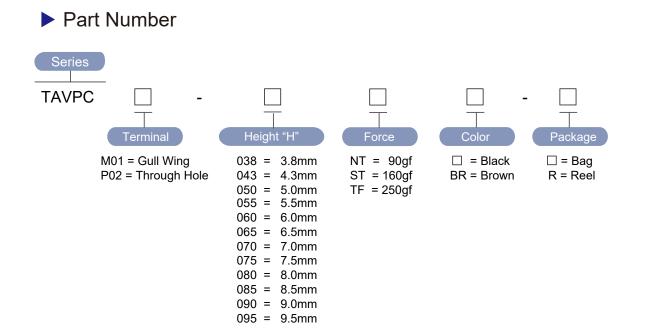
- Multiple options of stems & force
- Multiple color of stem
- Compact size
- RoHS Compliant



#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA6T	Iron	PA6T	Stainless Steel Ag plated	Brass Ag plated

Operating Force	90, 160, 250gf
Actuator Travel	0.25 ± 0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	100,000 times
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max



NO.	Dimensions	Circuit
TAVPCM01		① ② 3 ④
		02
TAVPCP02		3-4

## HorustechTAHPCP03Series4.5\*4.5mm Tact Switch, Through, Side actuator

#### Product Features

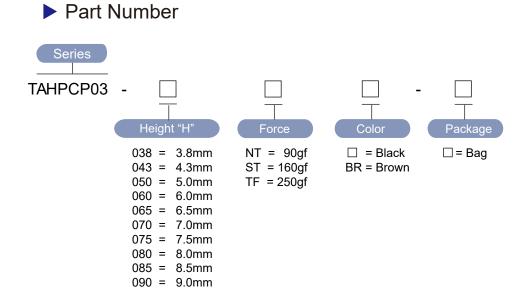
- · Multiple options of stems & force
- Multiple color of stem
- Compact size
- RoHS Compliant



#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA6T	Iron	PA6T	Stainless Steel Ag plated	Brass Ag plated

Operating Force	90, 160, 250gf
Actuator Travel	0.25 ± 0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	100,000 times
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max



TAHPCP03Series4.5\*4.5mm Tact Switch, Through, Side actuator

NO.	Dimensions	Circuit
TAHPCP03		û∘`>2 3

#### Product Features

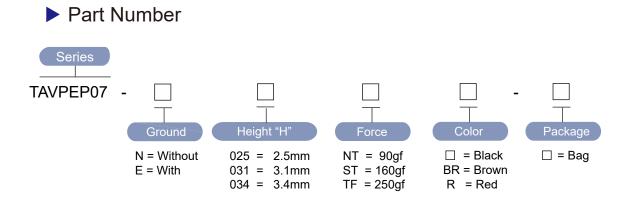
- Multiple options of stems & force
- Multiple color of stem
- Options with ground pin
- RoHS Compliant



#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA6T	Stainless Steel	Nylon	Stainless Steel Ag plated	Brass Ag plated

Operating Force	90, 160, 250gf
Actuator Travel	0.25 ± 0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	500,000 times
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max



NO.	Dimensions	Circuit
TAVPEP07-N		
		3④
TAVPEP07-E		12
		3 → (3) (3) (4) (5) (4) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (5) (4) (5) (5) (5) (5) (5) (5) (5) (5

#### Product Features

- · Multiple options of stems & force
- Dust-proof
- Options with ground pin
- RoHS Compliant



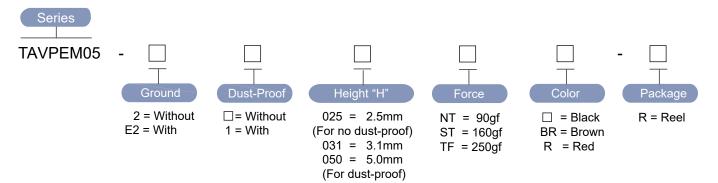
#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA6T	Stainless Steel	PA6T	Stainless Steel Ag plated	Brass Ag plated

#### Specification

Operating Force	90, 160, 250gf
Actuator Travel	0.25 ± 0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	500,000 times
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max

#### Part Number



NO.	Dimensions	Circuit
TAVPEM05-2		1 2 34
TAVPEM05-E2		() () () 
		34 ₹

## TAVPEJ10/ TAVPEM11Series6.2\*6.2mm Tact Switch, Reflow, Top actuator

#### Product Features

- · Multiple options of stems & force
- · Multiple color of stem
- Long total travel
- RoHS Compliant

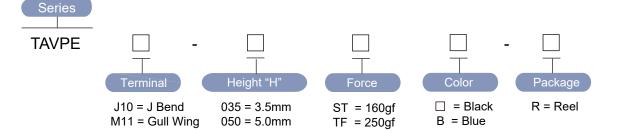


#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA6T	Stainless Steel	Rubber	Stainless Steel Ag plated	Brass Ag plated

Operating Force	160, 250gf
Actuator Travel	0.35 ±0.2mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	200,000 times
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max





## TAVPEJ10/ TAVPEM11Series6.2\*6.2mm Tact Switch, Reflow, Top actuator

NO.	Dimensions	Circuit
TAVPEJ10		1 2 3 4
TAVPEM11		1 2 } 3 4

## TAVPEU01 / TAVPEF02Series6.2\*6.2mm Tact Switch, Reflow, Top actuator

#### Product Features

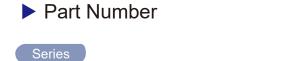
- · Multiple options of stems & force
- Multiple color of stem
- Options with ground pin
- RoHS Compliant

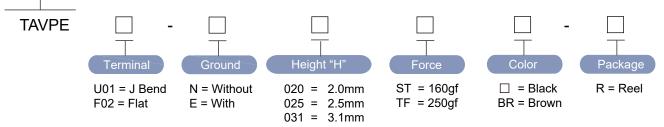


#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA6T	Stainless Steel	PA6T	Phosphor Bronze Ag plated	Brass Ag plated

Operating Force	160, 250gf
Actuator Travel	0.25 ± 0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	500,000 times
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max





## TAVPEU01 / TAVPEF02Series6.2\*6.2mm Tact Switch, Reflow, Top actuator

NO.	Dimensions	Circuit
TAVPEU01-N		1 2 3 4
TAVPEU01-E		
TAVPEF02-N		1 - 2 3 - 4
TAVPEF02-E		1 2 3 4

# TAVPDU21Series6.0\*6.0mm Tact Switch, Reflow, Top actuator

### Product Features

- · Multiple options of force
- Great operating feeling
- Long travel
- RoHS Compliant



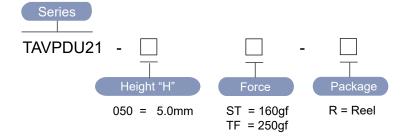
#### Materials

Part Name	Base	Cover	Rubber Stem	Contact	Terminal
Material	LCP	LCP	Silica Gel	Phosphor Bronze Ag plated	Brass Ag plated

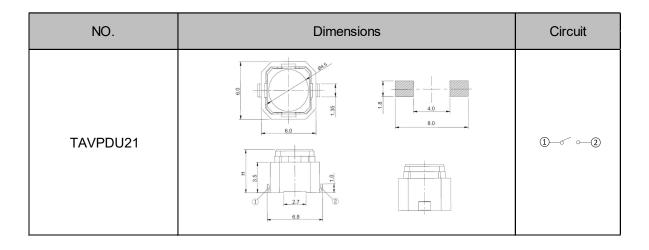
### Specification

Operating Force	160, 250gf
Actuator Travel	1.3 ± 0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	100,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max

### Part Number



# TAVPDU21Series6.0\*6.0mmTactSwitch,Reflow,Topactuator



# TAHPDM03Series6.0\*6.0mmTactSwitch,Reflow,Sideactuator

### Product Features

- · Multiple options of force
- Strong body
- High reailability
- RoHS Compliant



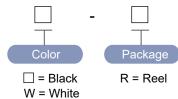
#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA6T	Stainless Steel Ag plated	Nylon	Stainless Steel Ag plated	Brass Ag plated

### Specification

Operating Force	160, 250, 320gf
Actuator Travel	0.30 ±0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	200,000 times
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max





□= With N = Without

Solder Pad

Height "H" 023 = 2.3mm 044 = 4.4mm

ST = 160gf

TF = 250gf TT = 320gf

NO.	Dimensions	Circuit
TAHPDM03		Û <i>_∽∽</i> ∞ <i>—</i> ⊘
TAHPDM03-N		
		Û∽ °2

# TAVPCF19 / TAVPCU18 / TAVPCM16 Series 5.0\*5.0mm Tact Switch, Reflow, Top actuator

#### Product Features

- Multiple options of force & height
- Multiple options of stems
- High reailability
- RoHS Compliant



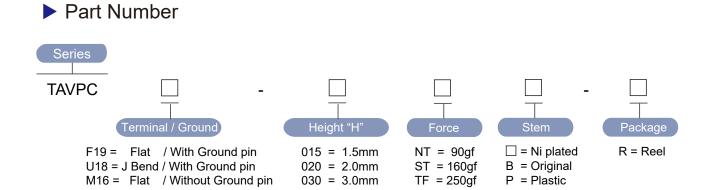




#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	LCP	SUS Ag plated	Brass Ni plated	SUS Ag plated	Brass Ag plated

Operating Force	90, 160, 250, 320gf
Actuator Travel	0.25 ± 0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	2,000,000 times
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max



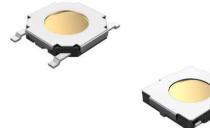
# TAVPCF19 / TAVPCU18 / TAVPCM16 Series 5.0\*5.0mm Tact Switch, Reflow, Top actuator

NO.	Dimensions	Circuit
TAVPCF19		
TAVPCU18		
TAVPCM16		1 <u>−</u> 2 3 <u>−</u> 4

# TAVPCM15 / TAVPCU11Serues5.0\*5.0mm Tact Switch, Reflow, Top actuator

### Product Features

- · Multiple options of force
- Options of ground pin
- High reailability
- RoHS Compliant

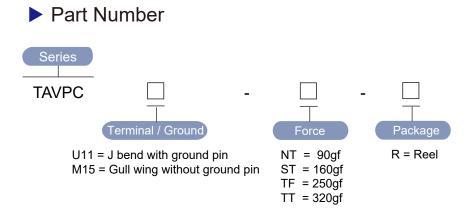


#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	LCP	SUS Ag plated	Brass Ni plated	Stainless Steel Ag plated	Brass Ag plated

### Specification

Operating Force	90, 160, 250, 320gf
Actuator Travel	0.25 ± 0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	200,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max



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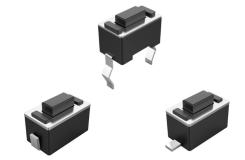
# TAVPCM15 / TAVPCU11Serues5.0\*5.0mm Tact Switch, Reflow, Top actuator

NO.	Dimens	Circuit	
TAVPCM15			1 2 3 4
TAVPCU11			

# TAVPBP06 / TAVPBF09 / TAVPBU10Series6.0\*3.5mm Tact Switch, Reflow / Through hole, Top actuator

### Product Features

- · Multiple options of force / terminal
- Multiple options of stem color
- Compact size
- RoHS Compliant



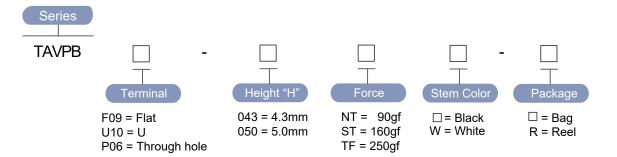
#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA6T	Iron	PA6T	Stainless Steel Ag plated	Brass Ag plated

#### Specification

Operating Force	90, 160, 250gf
Actuator Travel	0.25 ±0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	50,000 times
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max

### Part Number



NO.	Dimensions	Circuit
TAVPBP06		1-0-0-2
TAVPBF09		Ĵ○``>②
TAVPBU10		( <u>)</u> 2

# TAVPBF18 / TAVPBU19Series6.0\*3.7mm Tact Switch, Reflow, Top actuator

### Product Features

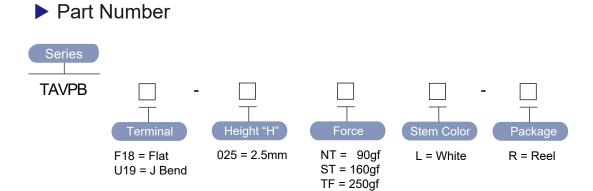
- Multiple options of force
- · Multiple options of stem color
- Compact size
- RoHS Compliant



#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	LCP	Stainless Steel	LCP	Stainless Steel Ag plated	Brass Ag plated

Operating Force	90, 160, 250
Actuator Travel	0.25 ±0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	50,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max



# TAVPBF18 / TAVPBU19Series6.0\*3.7mm Tact Switch, Reflow, Top actuator

NO.	Dimensions	Circuit
TAVPBF18		①∽ ~2
TAVPBU19		ĵ_~~ ~~_2

### Product Features

- Multiple options of force
- Multiple options of stem color
- Normal close
- RoHS Compliant

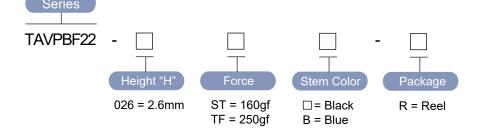


#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	LCP	Stainless Steel Ag plated	Silica gel	Stainless Steel Ag plated	Brass Ag plated

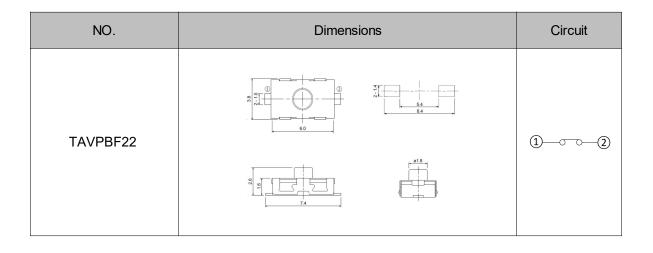
Operating Force	160, 250gf
Actuator Travel	0.40 ±0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	100,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max





TAVPBF22Series6.0\*3.8mmTact Switch, Normal Close

### Diagram



#### TAHPBM02 / TAHPAM04 Series Tact Switch, Reflow, Side actuator

### Product Features

- · Multiple options of force
- Support post
- · High reailability
- · RoHS Compliant

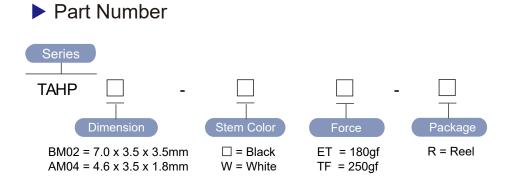


#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	LCP	Brass Cu Sn plated	LCP	Stainless Steel Ag plated	Brass Ag plated

### Specification

Operating Force	180, 250gf
Actuator Travel	BM02 = 0.25 ±0.1mm, AM04 = 0.15 ±0.05mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	50,000 times
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max



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TAHPBM02 / TAHPAM04 Series Tact Switch, Reflow, Side actuator

### Diagram

NO.	Dimensions	Circuit
TAHPBM02	7.0 $7.0$	12 34
TAHPAM04	$ \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array}\\ \end{array}\\ \end{array}\\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} $ } \\ \end{array} \\ \end{array}  } \\ \end{array} \\ \end{array}  } \\ \end{array} \\ \end{array} \\ \end{array}  } \\ \end{array} \\ \end{array} \\ \end{array}  } \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array}  } \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array}  } \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array}  } \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\  } \\ \end{array} \\ \end{array} \\ \end{array} \\  } \\ \end{array} \\ \end{array} \\ \end{array} \\  } \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array}  } \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\  } \\ \end{array} \\ \end{array} \\ \end{array} \\  } \\ \end{array} \\ \end{array} \\ \end{array}  } \\ \end{array} \\ \end{array} \\ \end{array} \\  } \\ \end{array} \\  } \\ \end{array} \\  } \\ \end{array} \\ \end{array} \\  } \\ \end{array} \\  } \\ \end{array} \\ \end{array} \\  } \\ \end{array} \\  } \\ \end{array} \\  } \\ \end{array} \\ \end{array} \\  } \\ \end{array} \\  } \\ \end{array} \\  } \\ \end{array} \\  } \\ \end{array} \\ \end{array} \\  } \\ \end{array} \\   \\  } \\  } \\ \end{array} \\  } \\  } \\ \end{array} \\  } \\ \end{array} \\  } \\  } \\  } \\  } \\  } \\  } \\  } \\ \end{array} \\  }  } \\   } \\  }	12 3o`_o4

#### TAHPAM21 / TAHPAM31 Series Tiny Side Switch, Reflow

### Product Features

- Multiple options of force
- Support post
- Tiny type
- RoHS Compliant



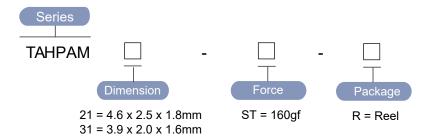
#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	High-Temp	Phosphor Bronze	High-Temp	Stainless Steel	Brass
	thermoplastic	Ag plated	thermoplastic	Ag plated	Ag plated

### Specification

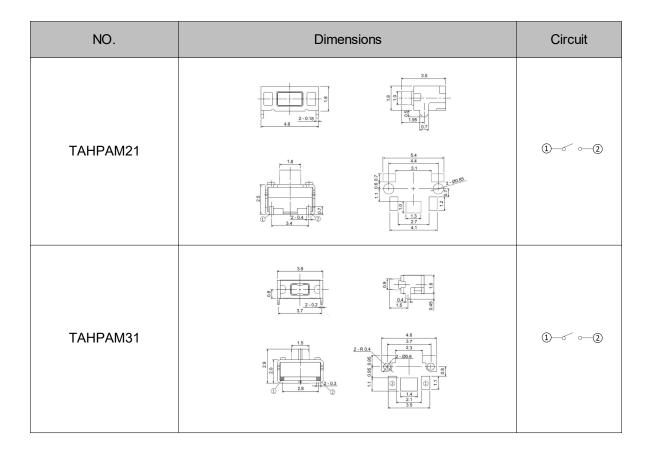
Operating Force	160gf
Actuator Travel	0.20 ±0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	100,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max

### Part Number



TAHPAM21 / TAHPAM31 Series Tiny Side Switch, Reflow

### Diagram



# TAHPAM16 / TAHPAM161SeriesMid Mount Tact Switch, Reflow

#### Product Features

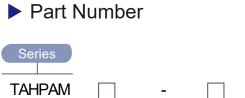
- Multiple options of force
- Multiple options of stem color
- Midmount
- RoHS Compliant



#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	LCP	Stainless Steel	LCP	Stainless Steel Ag plated	Phosphor Bronze Ag plated

Operating Force	180, 250gf
Actuator Travel	16 : 0.20 ±0.1mm, 161 : 0.15 ±0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	16 : 50mA, 12VDC, 161 : 20mA, 15VDC
Actuation Life Cycle	200,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	500mΩ max





TAHPAM16 / TAHPAM161SeriesMid Mount Tact Switch, Reflow

### Diagram

NO.	Dimensions	Circuit
TAHPAM16	9 9 1 2 4 8 9 1 1 2 6 15 1 1 2 6 1 5 1 1 1 2 6 1 1 1 1 1 1 1 1 1 1 1 1 1	
TAHPAM161		123

### Product Features

- Multiple options of force
- Stronger body
- Mini type
- RoHS Compliant



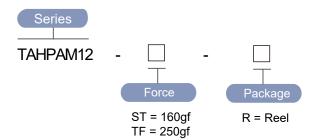
#### Materials

I	Part Name	Base	Cover	Stem	Contact	Terminal
	Material	LCP	Phosphor Bronze Ag plated	LCP	Stainless Steel Ag plated	Phosphor Bronze Ag plated

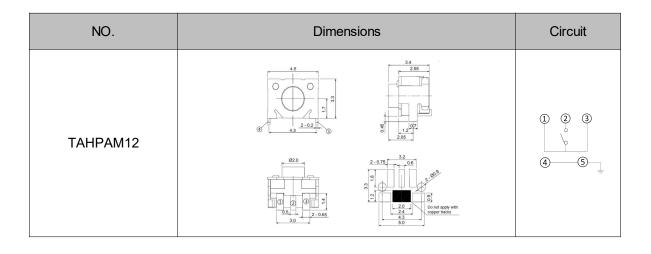
### Specification

Operating Force	160, 250gf
Actuator Travel	0.20 ±0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	100,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	500mΩ max

### Part Number



TAHPAM12Series4.5\*2.5mm Tact Switch, Reflow, Side actuator



#### TAVPAU10 / TAVPAF11 **Series** 3.2\*4.2mm Tact Switch, Reflow, Top actuator

#### Product Features

- · Multiple options of force & height
- · Multiple options of stem color
- Mini type
- · RoHS Compliant



#### Materials

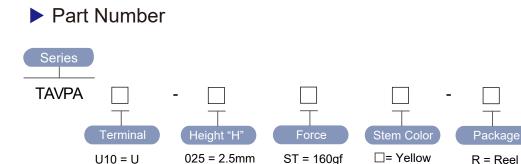
Part Name	Base	Cover	Stem	Contact	Terminal
Material	LCP	Phosphor Bronze	LCP	Stainless Steel Ag plated	Brass Ag plated

### Specification

Operating Force	160, 250gf
Actuator Travel	0.20 ±0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	100,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	500mΩ max

TF = 250gf

L = White



F11 = Flat

# TAVPAU10 / TAVPAF11Series3.2\*4.2mm Tact Switch, Reflow, Top actuator

NO.	Dimensions	Circuit
TAVPAU10		1 2 34
TAVPAF11		1 2 3 4

# TAHPAU13 / TAHPAF14 / TAVPAU23 / TAVPAF24 Series 4.7\*3.5mm Tact Switch, Reflow, Top / Side actuator

#### Product Features

- · Multiple options of force
- Support post
- Mini type
- RoHS Compliant





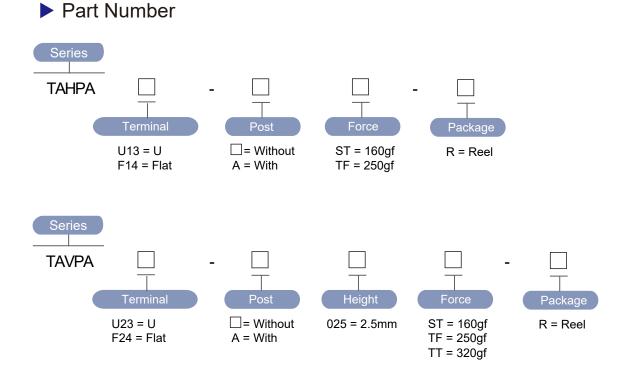




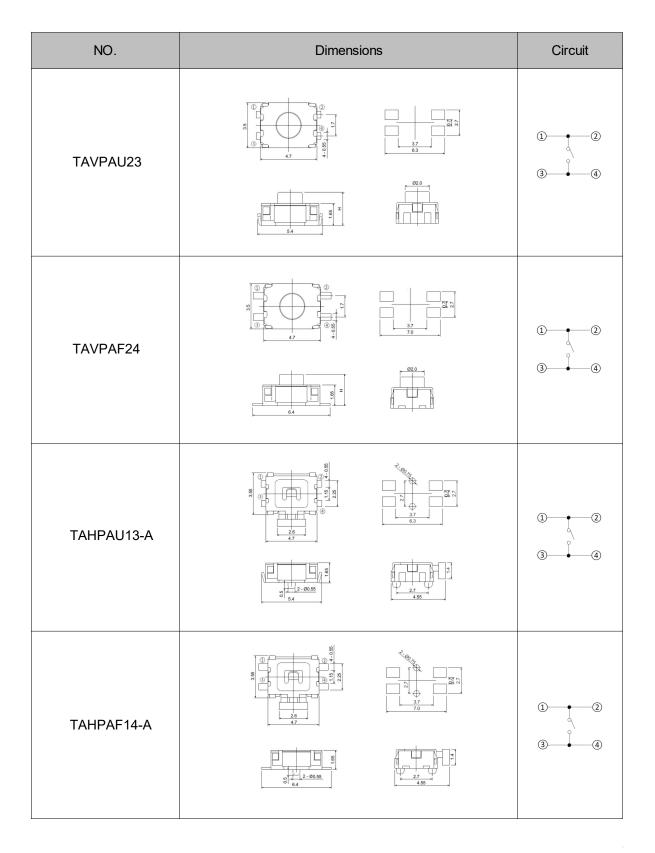
#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	LCP	Stainless Steel	LCP	Stainless Steel Ag plated	Phosphor Bronze Ag plated

Operating Force	160, 250gf
Actuator Travel	0.25 ±0.15mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	100,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max



#### TAHPAU13 / TAHPAF14 / TAVPAU23 / TAVPAF24 Series 4.7\*3.5mm Tact Switch, Reflow, Top / Side actuator



# TAHPAU08 / TAHPAF09 / TAVPAU07 / TAVPAF06 Series 3.9\*2.9mm Tact Switch, Reflow, Top / Side actuator

### Product Features

- Multiple options of force
- Support post
- Mini type
- RoHS Compliant







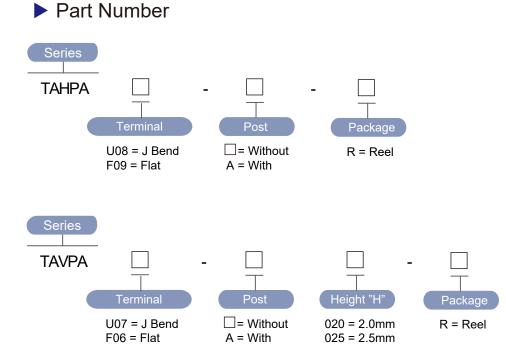


#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	LCP	Stainless Steel	LCP	Stainless Steel Ag plated	Phosphor Bronze Ag plated

### Specification

Operating Force	160gf
Actuator Travel	Vertical : 0.13 ±0.1mm, Horizontal : 0.20 ±0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	150,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max



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#### TAHPAU08 / TAHPAF09 / TAVPAU07 / TAVPAF06 Series 3.9\*2.9mm Tact Switch, Reflow, Top / Side actuator

NO.	Dimensions	Circuit
TAVPAF06		₫—∽ ∽—@
TAVPAU07		
TAHPAU08-A		ᠿ—૰ૼ૰—②
TAHPAF09-A		Û—σ´ o—Q

# TAHPAF01 / TAVPAF02 Series 3.5\*3.0mm Tact Switch, Reflow,

#### Product Features

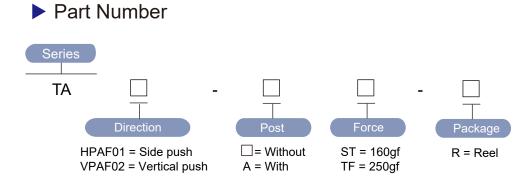
- · Multiple options of force
- Support post
- Mini type
- RoHS Compliant



#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	LCP	Stainless Steel Ag plated	LCP	Stainless Steel Ag plated	Phosphor Bronze Ag plated

Operating Force	160, 250gf
Actuator Travel	Vertical : 0.15 ±0.1mm, Horizontal : 0.20 ±0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	100,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max



TAHPAF01 / TAVPAF02 Series 3.5\*3.0mm Tact Switch, Reflow

### Diagram

NO.	Dimensions	Circuit
TAHPAF01-A		
TAVPAF02		

# TAVPAF03Series3.3\*3.3mmTact Switch, Reflow, Top actuator

### Product Features

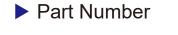
- Multiple options of force & height
- Multiple options of stem color
- Mini type
- RoHS Compliant

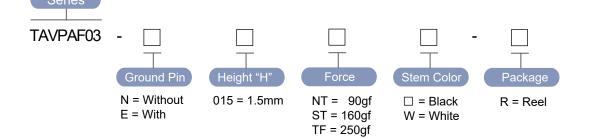


#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	LCP	Stainless Steel Ag plated	LCP	Stainless Steel Ag plated	Phosphor Bronze Ag plated

Operating Force	90, 160, 250gf
Actuator Travel	0.15 ±0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	100,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max





# TAVPAF03Series3.3\*3.3mmTactSwitch,Reflow,Topactuator

NO.	Dimensions	Circuit
TAVPAF03-E		
TAVPAF03-N		<ul> <li>① ②</li> <li>③ ④</li> </ul>

### Product Features

- · Multiple options of force
- Stronger body
- RoHS Compliant



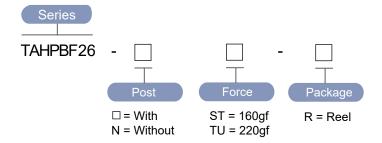
#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	LCP	Stainless Steel	PA46	Stainless Steel Ag plated	Brass Ag plated

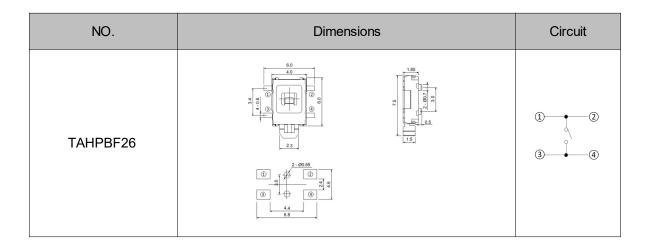
### Specification

Operating Force	160, 220gf
Actuator Travel	0.30 ±0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	100,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max

### Part Number



# TAHPBF26Series6.0\*4.0mm Tact Switch, Reflow, Side actuator



### Product Features

- Available for 1 or 2 actions
- Double stem
- RoHS Compliant

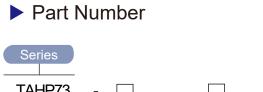


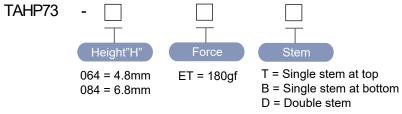


#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA66	Iron Ag plated	PA66	Stainless Steel Ag plated	Brass Ag plated

Operating Force	180gf
Actuator Travel	0.20 ±0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	100,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max





NO.	Dimensions	Circuit
TAHP73-D	$\begin{array}{c} 73 \\ \hline 0 \\ $	1 <u>0</u> 0 <u>4</u> 2 <u>0</u> 0 <u>3</u>
TAHP73-T	$\begin{array}{c} 73 \\ \hline 90 \\ \hline 90$	1-0-4

#### ТАНРВР07 / ТАНРВР04 **Series** Tact Switch, Through hole, Side actuator

### Product Features

- Available for stem height
- Bracket to be stronger
- · RoHS Compliant



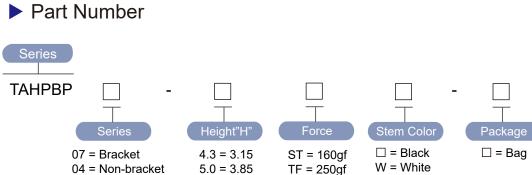


#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA6T	lron CuSn plated	PA6T	Stainless Steel Ag plated	Brass Ag plated

### Specification

Operating Force	160 / 250gf	
Actuator Travel	0.25 ± 0.1mm	
Operating Temperature Range	-20°C ~ 70°C	
Voltage Rating	50mA, 12VDC	
Actuation Life Cycle	50,000 times	
Insulation Resistance	100 MΩ min @ 500VDC	
Dielectric Strength	250VAC for 1 minute	
Contact Resistance	100mΩ max	



# TAHPBP07 / TAHPBP04SeriesTact Switch, Through hole, Side actuator

NO.	Dimensions	Circuit
TAHPBP07		34 (1o2
TAHPBP04		(j)(2)

# TAVPJP15Series12.0\*12.0mmTact Switch, Through Hole, Top actuator

#### Product Features

- Multiple options of force
- Multiple options of height
- Waterproof
- RoHS Compliant

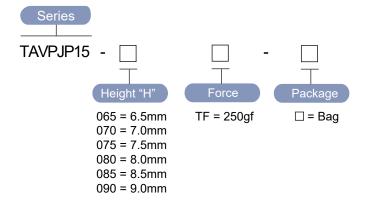


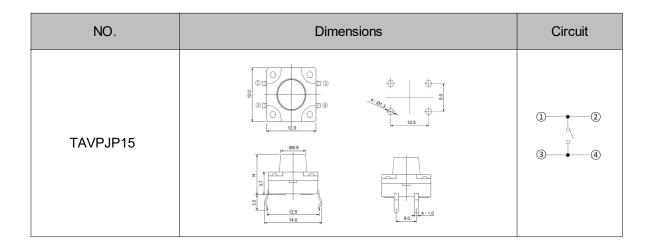
#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA6T	PA6T	PA6T	Phosphor Bronze Ag plated	Brass Ag plated

### Specification

Operating Force	160, 250gf	
Actuator Travel	0.35 ± 0.1mm	
Operating Temperature Range	-20°C ~ 70°C	
Voltage Rating	50mA, 12VDC	
Actuation Life Cycle	100,000 times	
Insulation Resistance	100 MΩ min @ 500VDC	
Dielectric Strength	250VAC for 1 minute	
Contact Resistance	100mΩ max	





# TAVPJP13Series6.0\*6.0mmTact Switch, Through Hole, Top actuator

### Product Features

- · Multiple options of force
- · Multiple options of height
- Waterproof
- RoHS Compliant

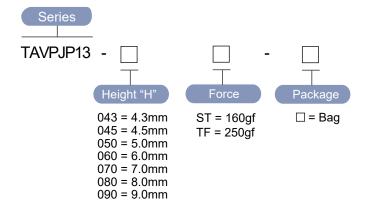


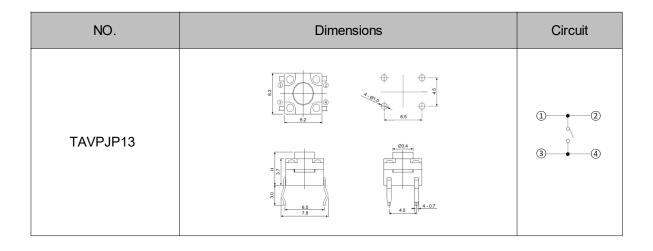
#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA6T	PA6T	PA6T	Phosphor Bronze Ag plated	Brass Ag plated

#### Specification

Operating Force	160, 250gf	
Actuator Travel	0.25 ±0.1mm	
Operating Temperature Range	-20°C ~ 70°C	
Voltage Rating	50mA, 12VDC	
Actuation Life Cycle	100,000 times	
Insulation Resistance	100 MΩ min @ 500VDC	
Dielectric Strength	250VAC for 1 minute	
Contact Resistance	100mΩ max	





# TAVPJM17Series6.0\*6.0mmTact Switch, Reflow, Top actuator

#### Product Features

- Multiple options of force
- Multiple options of height
- Waterproof
- RoHS Compliant

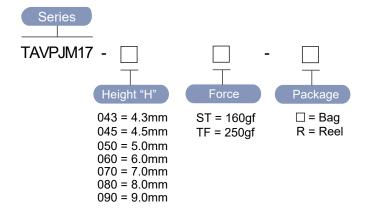


#### Materials

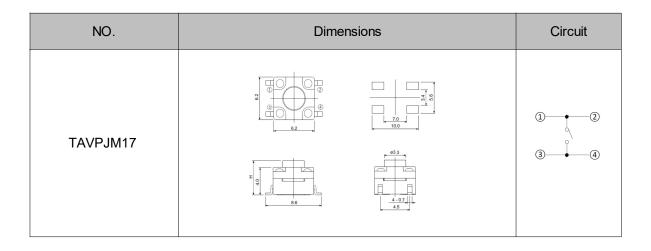
Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA6T	PA6T	PA6T	Phosphor Bronze Ag plated	Brass Ag plated

### Specification

Operating Force	160, 250gf	
Actuator Travel	0.25 ±0.1mm	
Operating Temperature Range	-20°C ~ 70°C	
Voltage Rating	50mA, 12VDC	
Actuation Life Cycle	100,000 times	
Insulation Resistance	100 MΩ min @ 500VDC	
Dielectric Strength	250VAC for 1 minute	
Contact Resistance	100mΩ max	



# TAVPJM17Series6.0\*6.0mmTactSwitch,Reflow,Topactuator



#### Product Features

- · Multiple options of force
- Thin type
- RoHS Compliant

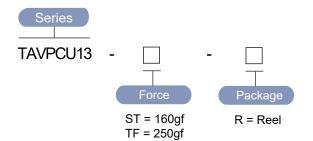


#### Materials

Р	art Name	Base	Terminal	Contact
	Material	LCP	Phosphor Bronze Ag plated	Stainless Steel Ag plated

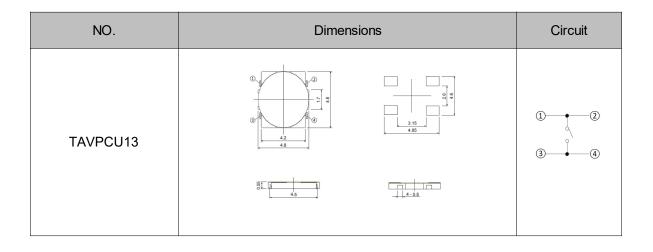
### Specification

Operating Force	160, 250gf
Actuator Travel	0.20 ± 0.05mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	100,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	100VAC for 1 minute
Contact Resistance	100mΩ max



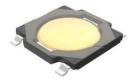
# HorustechTAVPCU13Series4.8\*4.8\*0.55mm Tact Switch, Reflow, Top actuator

### Diagram



#### Product Features

- · Multiple options of force
- Thin type
- RoHS Compliant

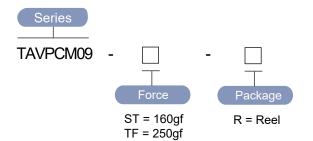


#### Materials

F	Part Name	Base	Terminal	Contact
	Material	LCP	Phosphor Bronze Ag plated	Stainless Steel Ag plated

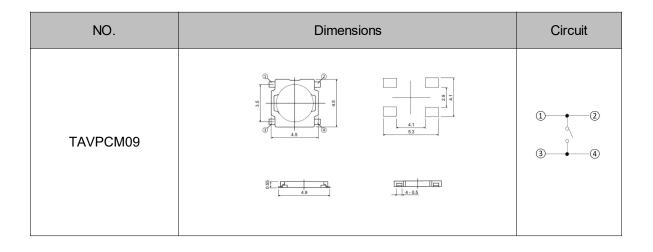
### Specification

Operating Force	160, 250gf
Actuator Travel	0.20 ± 0.05mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	500,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	100VAC for 1 minute
Contact Resistance	100mΩ max



# HorustechTAVPCM09Series4.5\*4.5\*0.55mmTact Switch, Reflow, Top actuator

### Diagram



#### Product Features

- · Multiple options of force
- Thin type
- RoHS Compliant

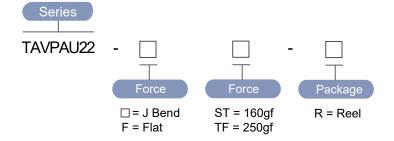


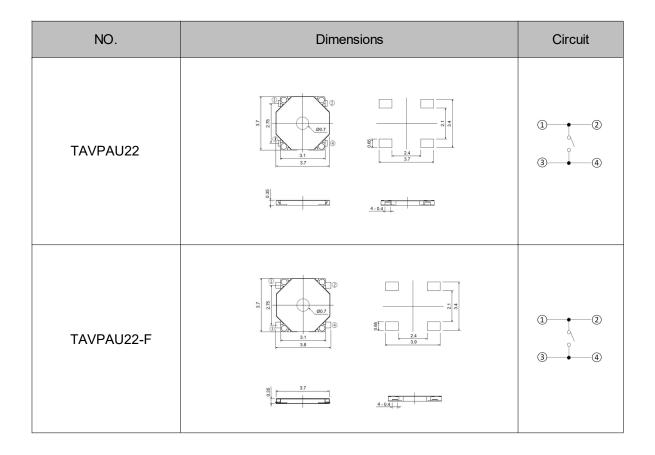
#### Materials

Part Name Base		Terminal	Contact	Stem
Material	LCP	Phosphor Bronze Ag plated	Stainless Steel Ag plated	Polymide

### Specification

Operating Force	160, 250gf
Actuator Travel	0.15 ±0.05mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	100,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	100VAC for 1 minute
Contact Resistance	100mΩ max





#### Horustech TAVPAU19 Series 3.0\*2.7mm Tact Switch, Reflow, Top actuator

#### Product Features

- · Multiple options of force
- Thin type
- RoHS Compliant



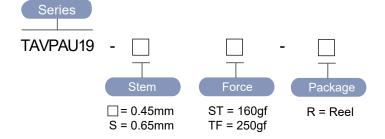
#### Materials

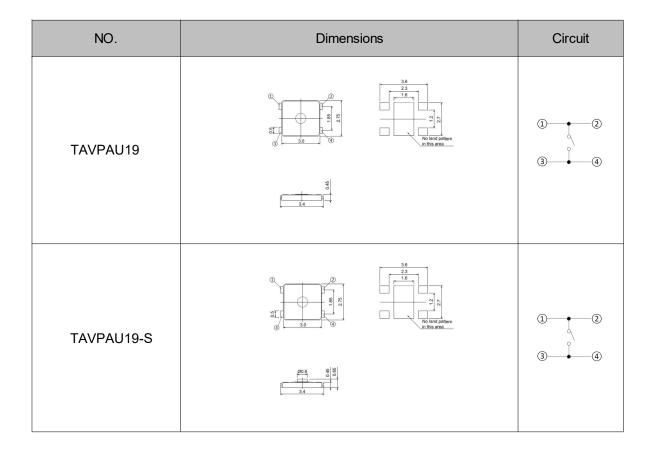
Part Name	Base	Terminal	Contact	Stem
Material	PA6T	Phosphor Bronze Ag plated	Stainless Steel Ag plated	TI4030-ST

### Specification

Operating Force	160 0E0 of
Operating Force	160, 250gf
Actuator Travel	0.15 ±0.05mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	100,000 times
Insulation Resistance	50 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	500mΩ max



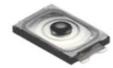




#### Horustech TAVPAU25 Series 3.0\*2.1mm Tact Switch, Reflow, Top actuator

#### Product Features

- · Multiple options of force
- Thin type
- RoHS Compliant

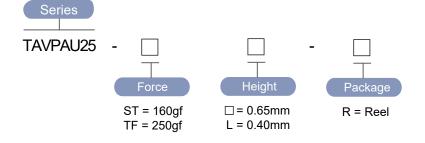


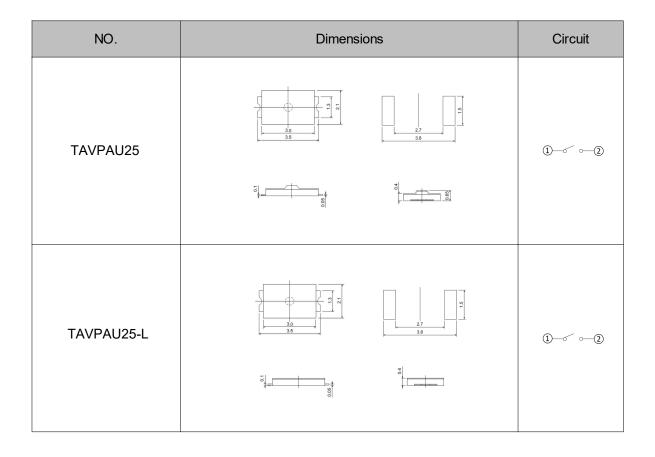
#### Materials

Part Nar	ame Base Terminal Contact		Contact	Stem	
Materia	al	PA6T	Phosphor Bronze Ag plated	Stainless Steel Ag plated	Polymide

### Specification

Operating Force	160, 250gf
Actuator Travel	0.13 ±0.05mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	100,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	100VAC for 1 minute
Contact Resistance	500mΩ max





#### Horustech TAVPH01 Series 3.0\*2.7mm Tact Switch, Reflow, Top actuator

#### Product Features

- · Multiple options of force
- Compact type
- RoHS Compliant

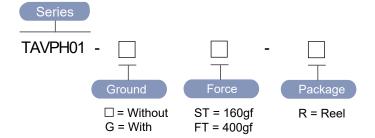


#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	LCP	SUS Ag plated	LCP	SUS Ag plated	Phosphor Bronze Ag plated

### Specification

Operating Force	160, 400gf
Actuator Travel	0.12 ±0.1mm
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	200,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	100VAC for 1 minute
Contact Resistance	100mΩ max



TAVPH01Series3.0\*2.7mmTact Switch, Reflow, Top actuator

NO.	Dimensions	Circuit
TAVPH01-G		
TAVPH01		

# ADPSSeriesBox type2.54 pitchDIP SwitchTop actuated

#### Product Features

- Multiple options of positions
- Multiple options of housing color
- · Gold plated at contact area
- RoHS Compliant

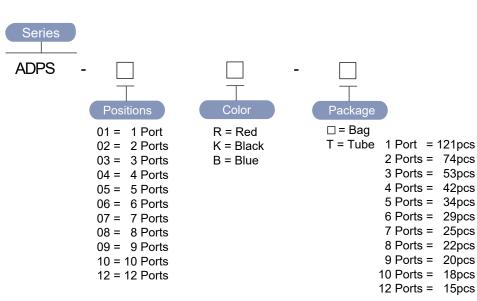


#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PBT	PBT	PBT	Copper alloy Au plated	Brass Au plated

#### Specification

Operating Force	1,000gf Max
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	25mA, 24VDC (Switching)
	100mA, 50VDC (Non-Switching)
Actuation Life Cycle	2,500 times
Insulation Resistance	100MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	50mΩ Max



# HorustechADPSSeriesBox type2.54 pitchDIP SwitchTop actuated

### Diagram

NO.	Dimensions	Circuit
ADPS	Position       L1       L2         1       4.06       -         2       6.60       2.54         3       9.14       5.08         4       11.68       7.62         5       14.22       10.16         6       16.76       12.23         9       2.43       30.32         10       2.59,222,265       -         12       32.00       27.94	

# HorustechADPASeriesBox type2.54 pitchDIP SwitchSide actuated

#### Product Features

- Multiple options of positions
- Multiple options of housing color
- Gold plated at contact area
- RoHS Compliant

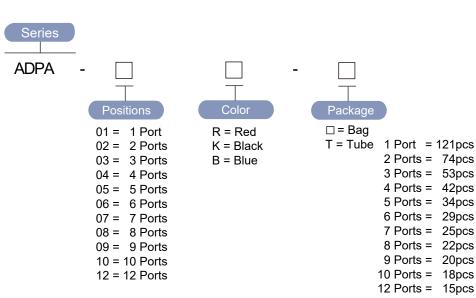


#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PBT	PBT	PBT	Copper alloy Au plated	Brass Au plated

#### Specification

Operating Force	1,000gf Max
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	25mA, 24VDC (Switching)
	100mA, 50VDC (Non-Switching)
Actuation Life Cycle	2,500 times
Insulation Resistance 100MΩ min @ 500VDC	
Dielectric Strength	250VAC for 1 minute
Contact Resistance	50mΩ Max



### Horustech ADPA Series Box type 2.54 pitch DIP Switch Side actuated

### Diagram

NO.	Dimensions	Circuit
ADPA	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	

#### ADPP(L) **Series** Horustech Box type 2.54 pitch DIP Switch Piano type

#### Product Features

- · Multiple options of positions
- · Multiple options of housing color
- · Gold plated at contact area
- · RoHS Compliant

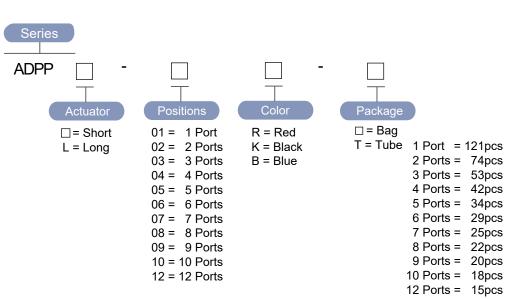


#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PBT	PBT	PBT	Copper alloy Au plated	Brass Au plated

#### Specification

Operating Force	1,000gf Max
Operating Temperature Range -20°C ~ 70°C	
Voltage Rating	25mA, 24VDC (Switching)
	100mA, 50VDC (Non-Switching)
Actuation Life Cycle	2,500 times
Insulation Resistance 100MΩ min @ 500VDC	
Dielectric Strength	250VAC for 1 minute
Contact Resistance	50mΩ Max

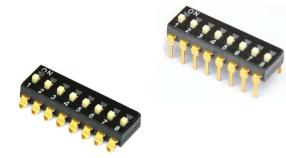


NO.	Dimensions	Circuit
ADPP	Position       L1       L2         1       4.06       2.54         2       6.50       2.54         3       9.14       50.86         4       11.88       7.62         5       14.22       10.16         6       16.76       12.70         7       19.30       15.241         8       2.144       17.78         9       24.33       20.322         10       26.50       27.94	
ADPPL	Position       L1       L2         1       4.06       2.54         3       9.14       5.08         4       11.68       7.62         6       15.76       12.70         7       19.30       17.78         9       24.38       20.32         10       25.22       22.86         12       32.00       27.94	

# HorustechAIPCSSeriesIC type2.54 pitchDIP SwitchTop actuated

#### Product Features

- · Multiple options of positions
- Gold plated at contact area
- RoHS Compliant

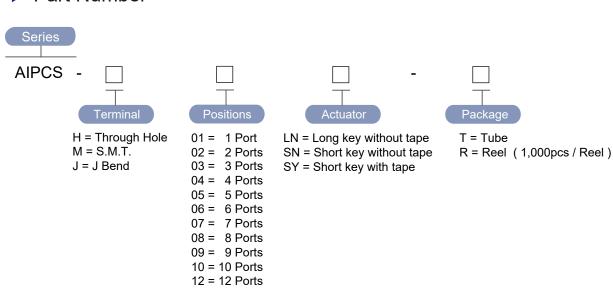


#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PPS	PPS	PA46	Copper alloy Au plated	Brass Au plated

#### Specification

Operating Force	1,000gf Max
Operating Temperature Range -20°C ~ 70°C	
Voltage Rating 25mA, 24VDC (Switching)	
	100mA, 50VDC (Non-Switching)
Actuation Life Cycle	2,000 times
Insulation Resistance	100MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	50mΩ Max



NO.		Dimensions	Circuit
AIPCS-HxxL	Position         L1         L2           1         2.54         -           2         5.08         2.54           3         7.62         5.08           4         10.16         7.62           5         12.70         10.16           6         15.24         12.70           7         17.76         15.24           9         22.66         20.32           10         25.40         22.96           12         30.48         27.94		
AIPCS-MxxS	Position         L1         L2           1         2.54         -           2         5.08         2.54           3         7.62         5.08           4         10.16         7.62           5         12.70         10.16           6         15.24         12.70           7         17.78         15.24           8         20.32         17.73           9         22.86         20.32           10         25.40         22.85           12         30.46         27.94		

### Horustech AIPCP Series IC type 2.54 pitch DIP Switch Piano type



- · Multiple options of positions
- Gold plated at contact area
- RoHS Compliant

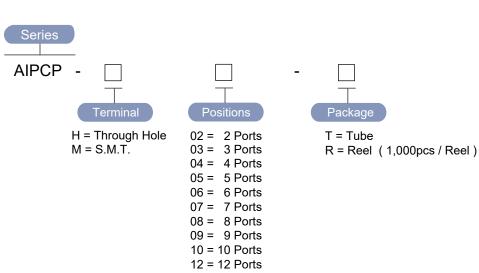


#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	High-Temp. Thermoplastic	High-Temp. Thermoplastic	PA46	Copper alloy Au plated	Brass Au plated

### Specification

Operating Force	1,000gf Max
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	25mA, 24VDC (Switching)
	100mA, 50VDC (Non-Switching)
Actuation Life Cycle	3,000 times
Insulation Resistance 100 MΩ min @ 500VDC	
Dielectric Strength	500VAC for 1 minute
Contact Resistance 50mΩ max	



NO.	Dimensions	Circuit
AIPCP-Hxx-T	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	
AIPCP-Mxx-T	Position       11	

### Horustech AIPCH Series IC type 1.27 pitch DIP Switch Top actuated

### Product Features

- · Multiple options of positions
- Gold plated at contact area
- RoHS Compliant

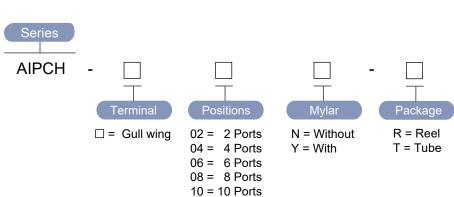


#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	High-Temp. Thermoplastic	High-Temp. Thermoplastic	LCP	Phosphor Bronze Au plated	Brass Au plated

### Specification

Operating Force	500gf Max
Operating Temperature Range	-40°C ~ 85°C
Voltage Rating	25mA, 24VDC (Switching)
	100mA, 50VDC (Non-Switching)
Actuation Life Cycle	1,000 times
Insulation Resistance	100MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ Max



### Horustech AIPCH Series IC type 1.27 pitch DIP Switch Top actuated

### Diagram

NO.		Dimensions	Circuit
AIPCH-xxx-x	Position         L1         L2           2         3.77         1.27           4         6.31         3.81           6         8.85         6.35           8         11.39         8.89           10         13.93         11.43		



#### Product Features

- 1P2T, 2P2T models
- · Multiple length of stem
- · Boss at bottom for better positioning
- · RoHS Compliant





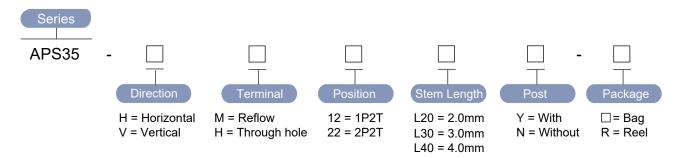


Part Name	Base	Cover	Stem	Contact	Terminal
Material	Nylon	SUS	Nylon	Beryllium Copper Ag plated	Brass Ag plated

### Specification

Operating Force	200gf
Operating Temperature Range	-10°C ~ 60°C
Voltage Rating	100mA, 12VDC (Switching)
	100mA, 50VDC (Non-Switching)
Actuation Life Cycle	10,000 times
Insulation Resistance	100MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ Max





NO.	Dimensions	Circuit
APS35-HH12		C ① ② ③ ↓ ↓ ↓
APS35-VH22		
APS35-HM12		C ⊕ ② ③ ↓ ↓ ↓

#### APHM14 Series Slide Switch, Reflow

#### Product Features

- 1P2T, 1P3T models
- · Multiple length of stem
- · Boss at bottom for better positioning
- RoHS Compliant



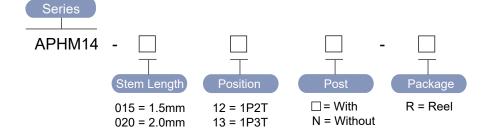
#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	LCP	Brass Ag plated	PA46	Beryllium Copper Ag plated	Phosphor bronze Ag plated

### Specification

Operating Force	1P2T : 150gf, 1P3T : 200gf
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	25mA, 24VDC (Switching)
	300mA, 5VDC (Non-Switching)
Actuation Life Cycle	10,000 times
Insulation Resistance	100MΩ min @ 100VDC
Dielectric Strength	100VAC for 1 minute
Contact Resistance	100mΩ Max





APHM14 Series Slide Switch, Reflow



NO.	Dimensions	Circuit
APHM14-12	$3 \cdot 04 + 30 + 15 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + $	
APHM14-13	$\begin{array}{c} 15 & 30 & 15 & 2 \cdot 04 \\ \hline & 0 & 0 & 0 & 0 & 15 \\ \hline & 0 & 0 & 0 & 0 & 0 & 15 \\ \hline & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 15 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 16 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 16 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 16 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 16 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 16 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 16 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 &$	

#### APVM14 Series Slide Switch, Vertical type

## Product Features

- · 2P2T models
- · Multiple length of stem
- · Boss at bottom for better positioning
- RoHS Compliant



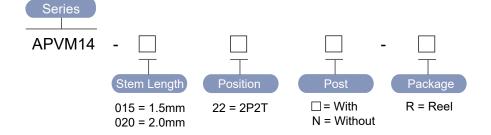
## Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	LCP	Brass Ag plated	PA46	Beryllium Copper Ag plated	Phosphor bronze Ag plated

# Specification

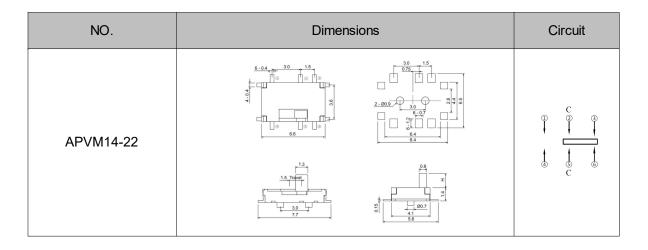
Operating Force	200gf
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	25mA, 24VDC (Switching)
	300mA, 5VDC (Non-Switching)
Actuation Life Cycle	10,000 times
Insulation Resistance	100MΩ min @ 100VDC
Dielectric Strength	100VAC for 1 minute
Contact Resistance	100mΩ Max





APVM14 Series Slide Switch, Vertical type





## Product Features

- 1P2T, 1P3T, 1P4T available
- Multiple length of stem
- RoHS Compliant

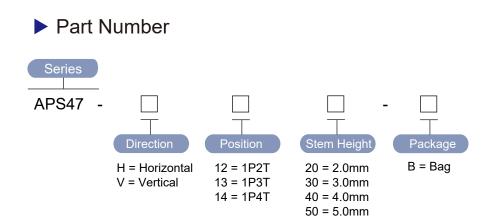


## Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA6T	SUS Ag plated	PA66	Beryllium Copper Ag plated	Phosphor bronze Ag plated

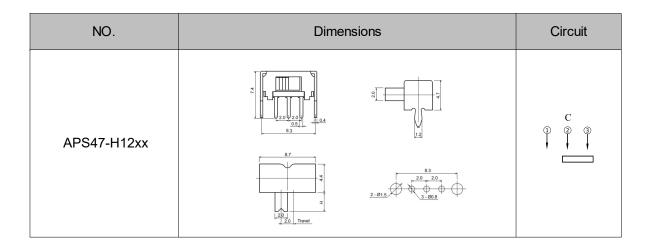
# Specification

Operating Force	200gf ±120gf
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	500mA, 36VDC
Travel	2.0mm
Actuation Life Cycle	10,000 times
Insulation Resistance	100MΩ min @ 250VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ Max



APS47 Series Slide Switch, 4.7mm Height

# Diagram



## RSH / RSC Series 7.2\*7.2 Rotary Switch

#### Product Features

- · Multiple options of height
- Available for 4, 10, 16 positions
- Waterproof
- RoHS Compliant

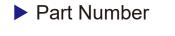


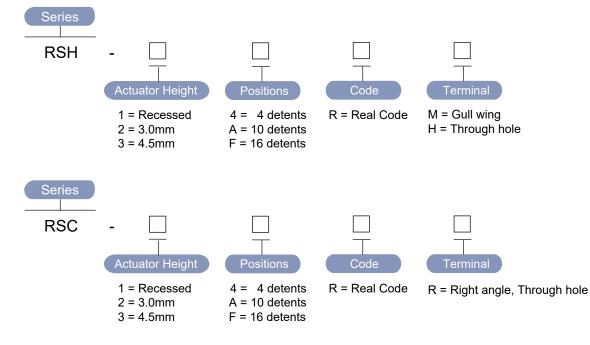
#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA	Stainless Steel	LCP	Beryllium copper Ag plated	Phosphor Bronze Ag plated

## Specification

Operating Force	40 ~ 200gf
Positions	4, 10, 16 detents
Operating Temperature Range	-20°C ~ 75°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	10,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max





RSH / RSC Series 7.2\*7.2 Rotary Switch

# Diagram

NO.	Dimensions	Circuit
RSH-14RM		CODE           Q         0         1         2         3           gg         0         0         1         2         3           gg         0
RSH-2ARM		
RSH-3FRH		
RSC-2ARR	$\begin{array}{c} & & & & \\ & & & & \\ & & & \\ & & & \\ & & & & \\$	

#### RSF Series 10.0\*10.0 Rotary Switch

## Product Features

- Multiple options of height
- Available for 10, 16 positions
- Waterproof
- RoHS Compliant

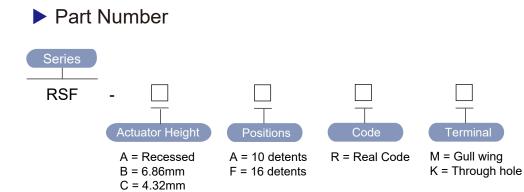


# Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PA	PA	LCP	Copper Alloy Au plated	Brass AuSn plated

# Specification

Operating Force	144 ~ 432gf
Positions	10, 16 detents
Operating Temperature Range	-40°C ~ 85°C
Voltage Rating	50mA, 12VDC
Actuation Life Cycle	10,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	500VAC for 1 minute
Contact Resistance	100mΩ max



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## RSF Series 10.0\*10.0 Rotary Switch



NO.	Dimensions	Circuit
RSF-AARM		
RSF-BFRM		
RSF-CARK		

#### APPS85 Series 8.5\*8.5mm Push Switch

## Product Features

- Multiple options of height
- Multiple options of stem color
- Available for terminal type
- RoHS Compliant



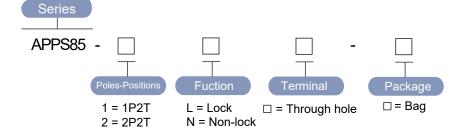
#### Materials

Part Name	Base	Cover	Stem	Spring	Terminal
Material	Nylon	PC	Nylon	Carbon wire	Brass Ag plated

# Specification

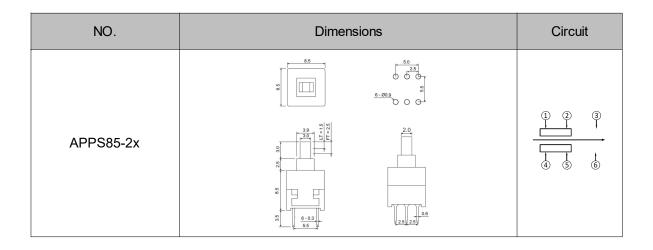
Operating Force	200gf
Operating Temperature Range	-10°C ~ 60°C
Voltage Rating	10mA, 30VDC
Actuation Life Cycle	10,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max

# Part Number



APPS85 Series 8.5\*8.5mm Push Switch

# Diagram



## Product Features

- Multiple options of height
- Multiple options of stem color
- Available for terminal type
- RoHS Compliant



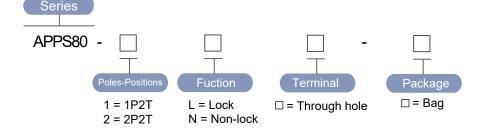
#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	Nylon	PC	Nylon	SUS	Brass Ag plated

# Specification

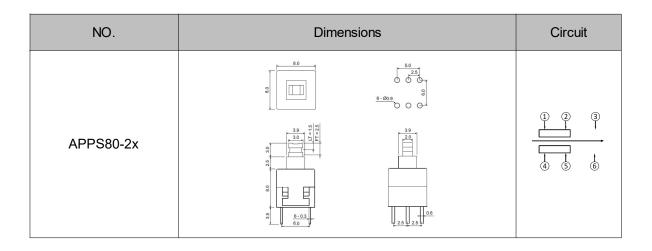
Operating Force	180gf
Operating Temperature Range	-10°C ~ 60°C
Voltage Rating	10mA, 30VDC
Actuation Life Cycle	10,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max

# Part Number



APPS80 Series 8.0\*8.0mm Push Switch

# Diagram



## Product Features

- Multiple options of height
- Multiple options of stem color
- Available for terminal type
- RoHS Compliant



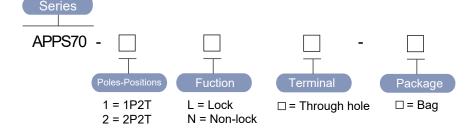
#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	Nylon	PC	Nylon	Carbon wire	Brass Ag plated

# Specification

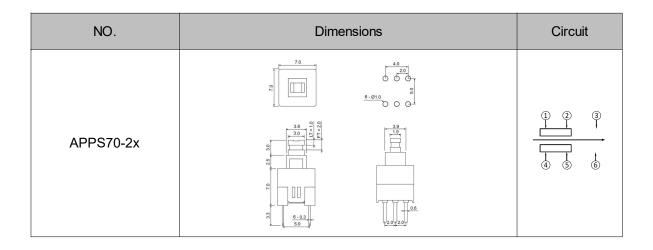
Operating Force	180gf
Operating Temperature Range	-10°C ~ 60°C
Voltage Rating	10mA, 30VDC
Actuation Life Cycle	10,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max

# Part Number



APPS70 Series 7.0\*7.0mm Push Switch

# Diagram



#### APPS58 Series 5.8\*5.8mm Push Switch

## Product Features

- Multiple options of height
- Multiple options of stem color
- Available for terminal type
- RoHS Compliant



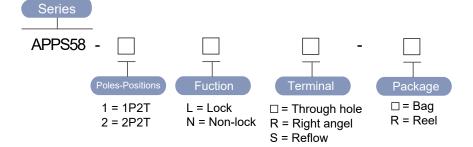
## Materials

Part	Name	Base	Cover	Stem	Spring	Terminal
Ма	aterial	Nylon	PC	Nylon	Stainless Steel	Copper Alloy Ag plated

# Specification

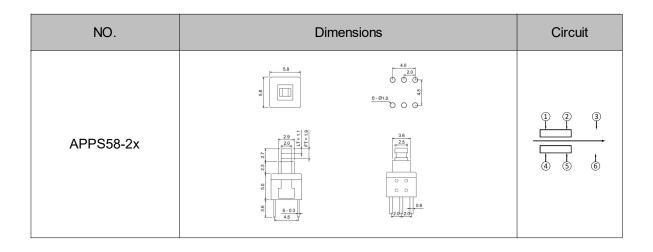
Operating Force	180gf
Operating Temperature Range	-10°C ~ 60°C
Voltage Rating	10mA, 30VDC
Actuation Life Cycle	10,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max

# Part Number



APPS58 Series 5.8\*5.8mm Push Switch

# Diagram



#### MASPV01 Series Sub-Miniature Micro Switch

## Product Features

- · Choice of terminal type
- · Multiple shapes of lever
- RoHS Compliant



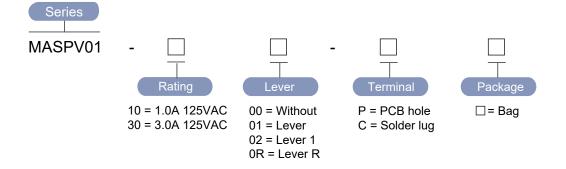
## Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PBT	PBT	PBT	Beryllium Copper Ag plated	Brass Ag plated

# Specification

Operating Force	Non-Stem : 130gf Max
	Lever type : 50gf Max
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	1 / 3A at 125VAC
Actuation Life Cycle	Mechanical : 1,000,000 times
	Electrical : 10,000 times
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	1000VAC for 1 minute
Contact Resistance	50mΩ max

# Part Number



MASPV01 Series Sub-Miniature Micro Switch

# Diagram

NO.	Dimensions	Circuit
MASPV01-00-P	12.7 12.7	NC 3COM 2 NO
MASPV01-01-P	$ \begin{array}{c} 13\\ \hline 13\\ \hline \\ \hline$	NC 3- COM 2 NO
MASPV01-0R-P	$\begin{array}{c} \hline \\ \hline $	NC COM ③① ②① NO

## Product Features

- Choice of switch currents of 6A to 26A
- · Multiple shapes of lever
- RoHS Compliant



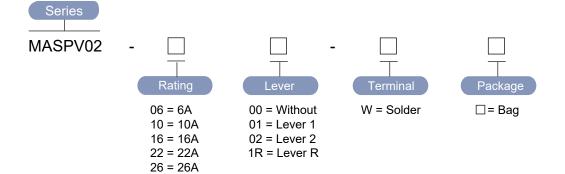
## Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PBT	PBT	PBT	Beryllium Copper Ag plated	Brass Ag plated

# Specification

Operating Force	200gf Max		
Operating Temperature Range	-20°C ~ 105°C		
Voltage Rating	6 / 10 / 16 / 22 / 26A at 125/250V AC		
Actuation Life Cycle	Mechanical : 2,000,000 times		
	Electrical : 100,000 times		
Insulation Resistance	100 MΩ min @ 500VDC		
Dielectric Strength	1500VAC for 1 minute		
Contact Resistance	30mΩ max		

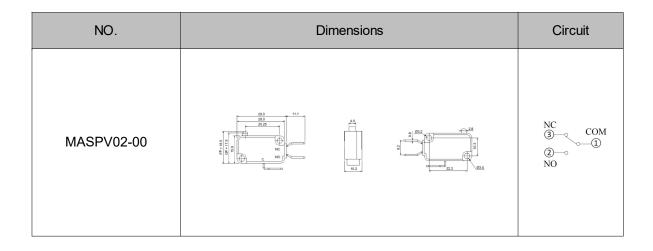




MASPV02 Series Basic Micro Switch



# Diagram



#### MASPV03 Series Miniature Micro Switch

## Product Features

- Choice of switch currents of 3A to 10A
- · Multiple shapes of lever
- Terminal for PCB hole and Solder lug
- RoHS Compliant



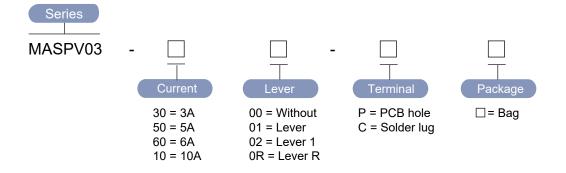
## Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	PBT	PBT	PBT	Beryllium Copper Ag plated	Brass Ag plated

# Specification

Operating Force	Non-Stem : 150gf Max	
	Lever type : 50gf Max	
Operating Temperature Range	-20°C ~ 105°C	
Voltage Rating	3 / 5 / 6 / 10A at 125/250V AC	
Actuation Life Cycle	Mechanical : 2,000,000 times	
	Electrical : 50,000 times	
Insulation Resistance	100 MΩ min @ 500VDC	
Dielectric Strength	1000VAC for 1 minute	
Contact Resistance	50mΩ max	

# Part Number



MASPV03 Series Miniature Micro Switch



NO.	Dir	mensions		Circuit
MASPV03-00-P				NC ③① ②
MASPV03-01-C	$ \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\$			NC COM ③① ②① NO
MASPV03-0R-C	16.0 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6	42 90 1/2 34 66	<b>X</b> <b>3.05</b> <b>3</b>	NC ③① ②① NO

#### Horustech MASPV04 S Ultra Sub-Min

#### MASPV04 Series Ultra Sub-Miniature Micro Switch



- · Tiny type
- Terminal for PCB hole and Reflow
- RoHS Compliant



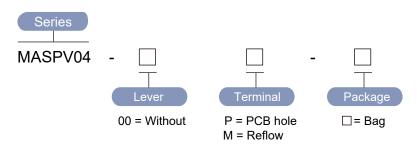
## Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	LCP	PA66	PA66	Beryllium Copper Ag plated	Brass Ag plated

# Specification

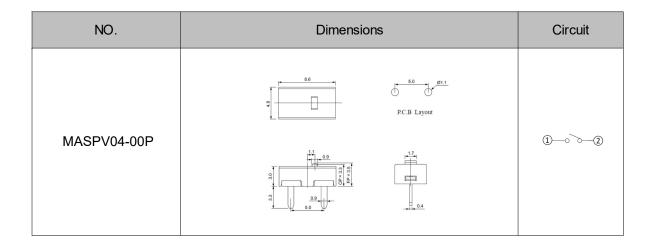
Operating Force	80gf Max
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	0.1A at 48VDC
Actuation Life Cycle	Mechanical : 1,000,000 times
	Electrical : 1.000,000 times
Insulation Resistance	50MΩ min @ 500VDC
Dielectric Strength	250VAC for 1 minute
Contact Resistance	100mΩ max

# Part Number



MASPV04 Series Ultra Sub-Miniature Micro Switch

# Diagram



#### ARPSH01 Series Standard Rocker Switch

## Product Features

- · Multiple options of terminal type
- · Multiple options of stem mark and housing
- Choice of switch currents of 6A to 10A
- RoHS Compliant
- Current : 6A, 125/250V AC (UL, VDE, CQC) 10A, 125/250V AC (UL, VDE)



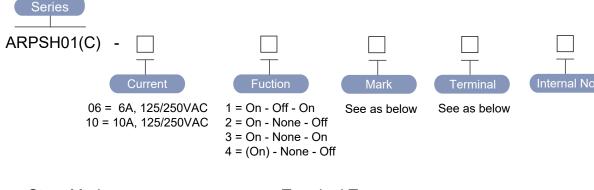
## Materials

Part Name	Base	Contact	Stem	Terminal
Material	PA66	Silver alloy	PA66	Brass Ag plating

# Specification

Voltage Rating	6~10A, 125/250V AC
Actuation Life Cycle	10,000 times
Operating Temperature Range	-20°C ~ 70°C
Insulation Resistance	100MΩ min @ 500VDC
Dielectric Strength	1500VAC for 1 minute
Contact Resistance	50mΩ max





#### Stem Mark

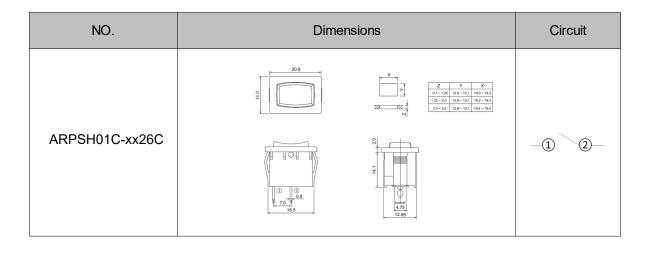
1	2	3	4	5	6	Х
-	•	1	-	ON		
0						Others
=		0	0	OFF		

	ermina	al I	уре	

С	Р	R	Х
		Ę	Others

## ARPSH01 Series Standard Rocker Switch

# Diagram



#### ARPSH02 **Series Standard Rocker Switch**

## Product Features

- · Multiple options of terminal type
- · Multiple options of stem mark and housing
- · Choice of switch currents of 16A to 20A
- RoHS Compliant



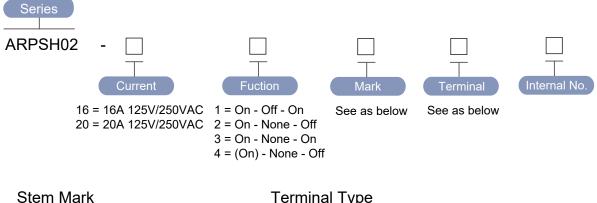
#### Materials

Part Name	Base	Contact	Stem	Terminal
Material	PA66	Silver alloy	PA66	Brass Ag plating

# Specification

Voltage Rating	16 to 20A 125/250V AC
Actuation Life Cycle	10,000 times
Operating Temperature Range	-20°C ~ 70°C
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	1500VAC for 1 minute
Contact Resistance	50mΩ max



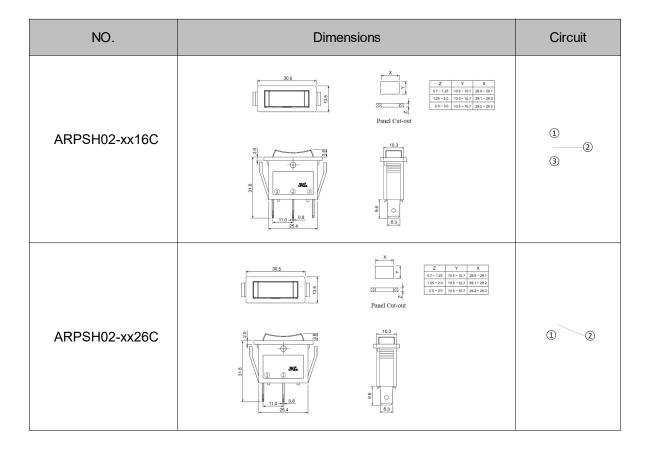


1	2	3	4	5	6	Х
-	•	1	-	ON		
0						Others
=		0	0	OFF		

	51	
S	С	Х
		Others

## ARPSH02 Series Standard Rocker Switch





#### ARPSH03 Series Standard Rocker Switch

## Product Features

- · Multiple options of terminal type
- · Multiple options of stem mark and housing
- Choice of switch currents of 6A to 10A
- RoHS Compliant



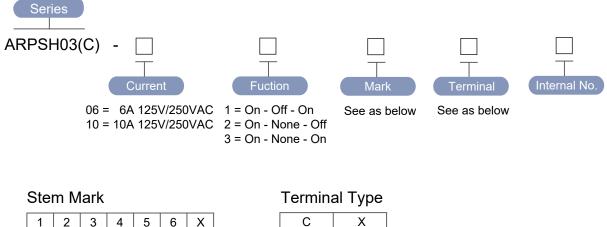
#### Materials

Part Name	Base	Contact	Stem	Terminal
Material	PA66	Silver alloy	PA66	Brass Ag plating

# Specification

Voltage Rating	6 to 10A 125/250V AC
Actuation Life Cycle	10,000 times
Operating Temperature Range	-20°C ~ 70°C
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	1500VAC for 1 minute
Contact Resistance	50mΩ max





Terrinia	атуре
С	Х
	Others

## ARPSH03 Series Standard Rocker Switch



# NO.DimensionsCircuitARPSH03C-xx26CImage: Circuit of the second seco

#### ARPSH04(C) Series Standard Rocker Switch

## Product Features

- · Multiple options of terminal type
- · Multiple options of stem mark and housing
- RoHS Compliant
- Current : 10A 125VAC, 6A 250VAC (UL) 6(4)A 250VAC (VDE) 6A 250VAC (CQC)

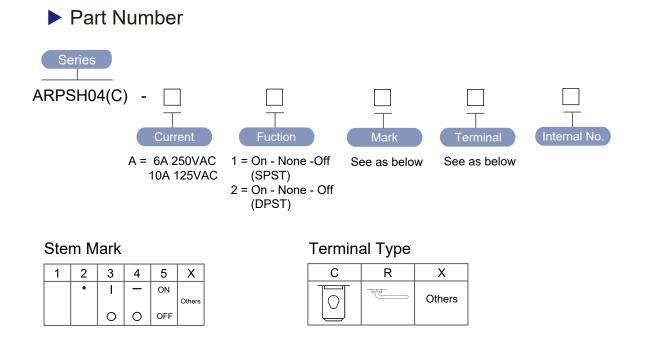


## Materials

Part Name	Base	Contact	Stem	Terminal
Material	PA66	Silver alloy	PA66	Brass Ag plating

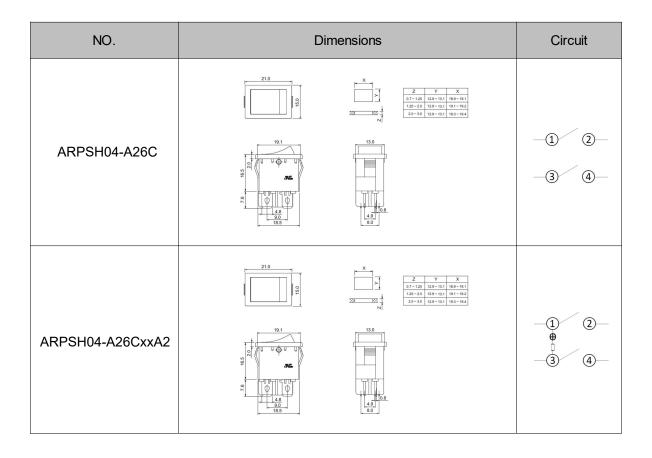
# Specification

Voltage Rating	6A 250VAC, 10A 125VAC
Actuation Life Cycle	10,000 times
Operating Temperature Range	-20°C ~ 70°C
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	1500VAC for 1 minute
Contact Resistance	100mΩ max



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# Diagram



#### ARPSH05 Series Miniature Rocker Switch

## Product Features

- · Multiple options of terminal type
- · Multiple options of stem mark and housing
- RoHS Compliant
- Current : 3A, 125/250V AC ( UL, VDE )

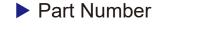


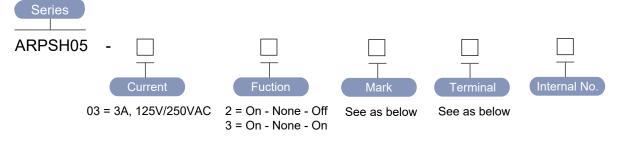
## Materials

Part Name	Base	Contact	Stem	Terminal
Material	PA66	Silver alloy	PA66	Brass Ag plating

# Specification

Voltage Rating	3A, 125/250V AC
Actuation Life Cycle	10,000 times
Operating Temperature Range	-20°C ~ 70°C
Insulation Resistance	1000MΩ min @ 500VDC
Dielectric Strength	1500VAC for 1 minute
Contact Resistance	50mΩ max





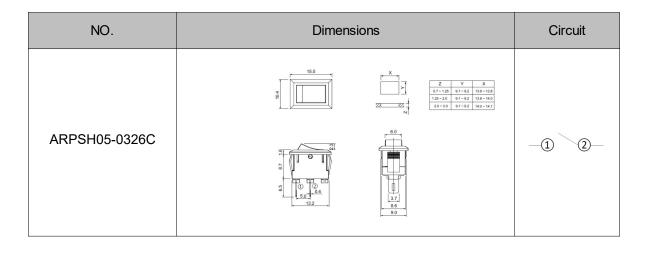
#### Stem Mark

1	2	3	4	5	6	Х
-	•	1	-	ON		
0						Others
=		0	0	OFF		

С	R	Х
	Ţ	Others

ARPSH05 Series Miniature Rocker Switch

# Diagram



#### ARPSH06 Series Rocker Switch

## Product Features

- · Multiple options of terminal type
- · Multiple options of stem mark and housing
- RoHS Compliant
- Current : 20A, 125VAC / 16A, 250VAC ( UL ) 15A, 125VAC / 10A, 250VAC ( UL ) 10A & 16A, 250VAC ( VDE )



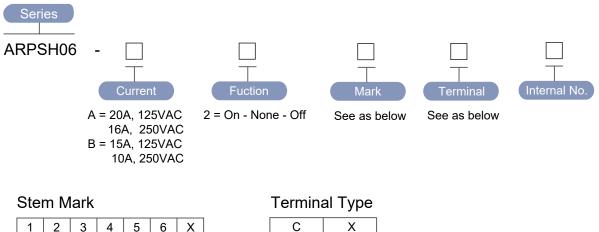
## Materials

Part Name	Base	Contact	Stem	Terminal
Material	PA66	Silver alloy	PA66	Brass Ag plating

# Specification

Voltage Rating	20A, 125VAC / 16A, 250VAC
Actuation Life Cycle	10,000 times
Operating Temperature Range	-20°C ~ 70°C
Insulation Resistance	1000MΩ min @ 500VDC
Dielectric Strength	1500VAC for 1 minute
Contact Resistance	50mΩ max



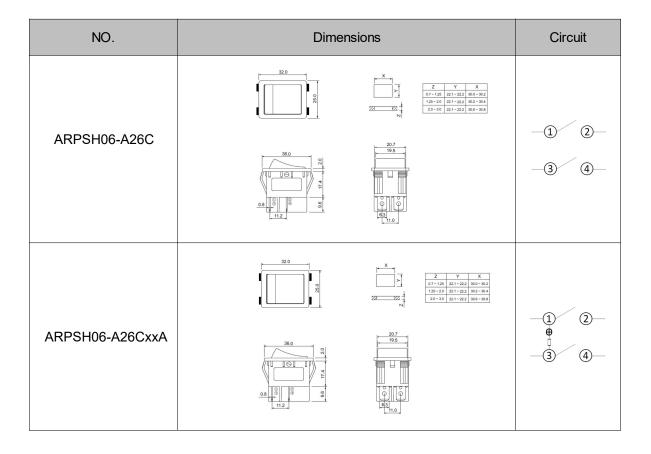


I	2	3	4	5	0	
-	•		-	ON		
0						Others
=		0	0	OFF		

	агтуре
С	Х
	Others

ARPSH06 Series Rocker Switch





#### Product Features

- Post supported
- Tiny Type
- RoHS Compliant



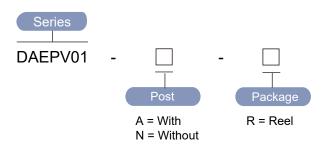
#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	LCP	SUS	LCP	Phosphor Bronze Ag plated	Phosphor Bronze Ag plated

### Specification

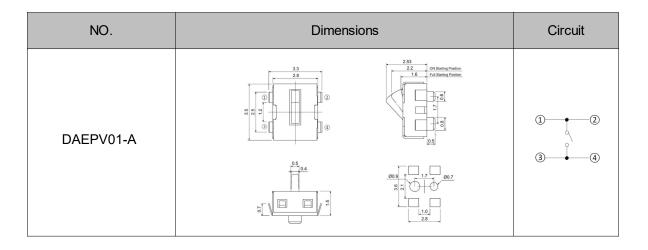
Operating Force	50gf Max
Operating Temperature Range	-20°C ~ 70°C
Voltage Rating	1mA, 5VDC
Actuation Life Cycle	100,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	100VAC for 1 minute
Contact Resistance	2Ω max

## Part Number



DAEPV01 Series Detector Switch





#### DAEPV02 Series Detector Switch

#### Product Features

- Post supported
- Tiny Type
- RoHS Compliant



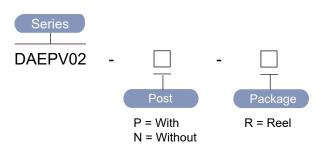
#### Materials

Part Name	Base	Cover	Stem	Contact	Terminal
Material	High-temp Thermoplasitc	SUS	High-temp Thermoplasitc	Phosphor Bronze Ag plated	Brass Ag plated

### Specification

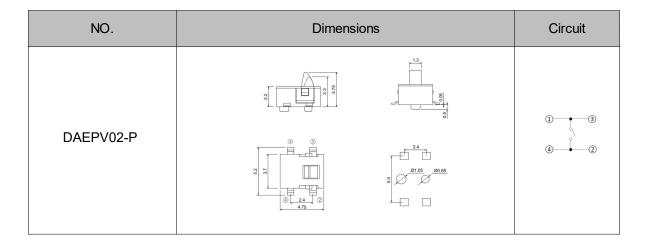
Operating Force	40gf Max
Operating Temperature Range	-10°C ~ 60°C
Voltage Rating	10mA, 5VDC
Actuation Life Cycle	50,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	100VAC for 1 minute
Contact Resistance	1Ω max





DAEPV02 Series Detector Switch





#### DAEPH03 Series Detector Switch

#### Product Features

- · Post / Ground pin supported
- Two-way Direction
- RoHS Compliant



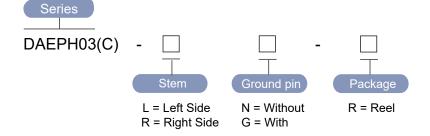
#### Materials

Part Nan	e Base	Cover	Stem	Contact	Terminal
Materia	PA66	SUS	PA66	Phosphor Bronze Ag plated	Brass Ag plated

### Specification

Operating Force	50gf Max
Operating Temperature Range	-10°C ~ 60°C
Voltage Rating	20mA, 20VDC
Actuation Life Cycle	50,000 times
Insulation Resistance	100 MΩ min @ 100VDC
Dielectric Strength	100VAC for 1 minute
Contact Resistance	1Ω max

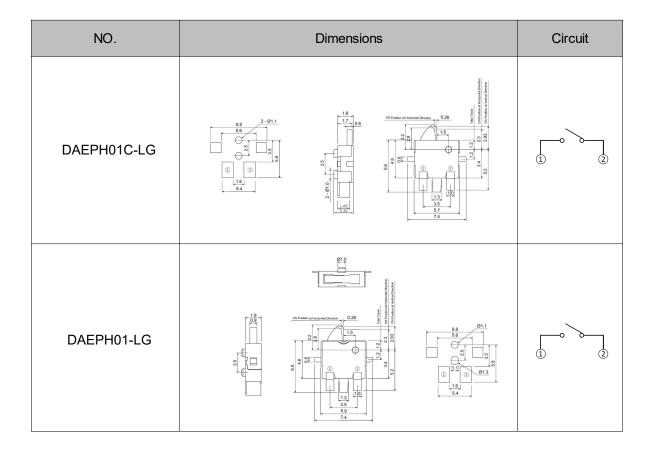




DAEPH03 Series Detector Switch



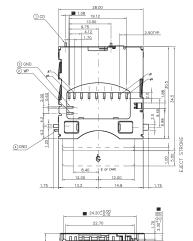
## Diagram

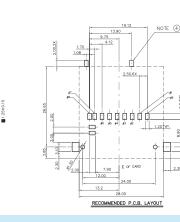


# ) Card

# HTCS03AA01







2.30

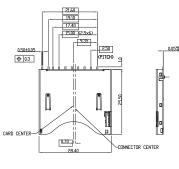
#### **SPECIFICATION**

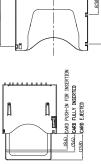
Insulation Resistance Card Inserttion Force Operating Life 10,000 Cycles Operating Temp -25°C to +85°C

Contact Resistance 100mΩ MAX 1000MΩ MIN. 500VDC 15N MAX

## HTCS03AA02



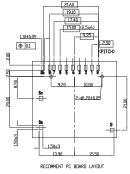




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### **SPECIFICATION**

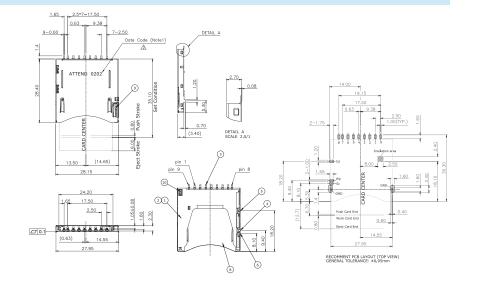
Contact Resistance	80mΩ MAX			0		
Insulation Resistance	1000MΩ MIN. 500VDC	001	24.16±0.05		AND FU	4
Card Inserttion Force	9.8N MAX			T Ì		121
Operating Life	10,000 Cycles		920 1000 3	ł	<u>H</u>	
Operating Temp	-25°C to +90°C			4		

## HTCS03AA03



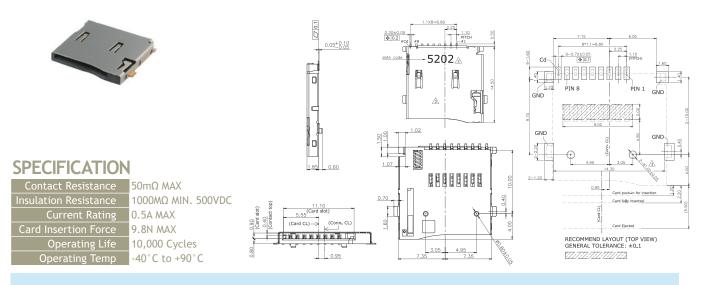
#### **SPECIFICATION**

Contact Resistance 80mΩ MAX Insulation Resistance 1000MΩ MIN 9.8N MAX Operating Life 10,000 Cycles Operating Temp -25°C to +90°C



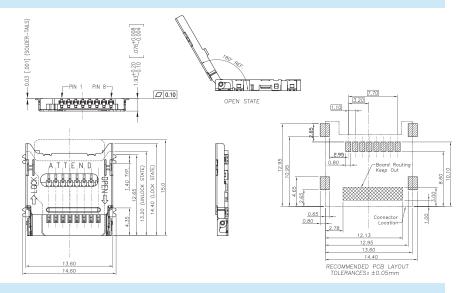
# **Micro SD Card**

# **HTCM19AA01**



## **HTCM03AA02**





#### **SPECIFICATION**

Contact Resistance	30mΩ MAX
Insulation Resistance	1000MΩ MIN. 500VDC
Current Rating	0.5A MAX
Operating Life	10,000 Cycles
Operating Temp	-40°C to +85°C

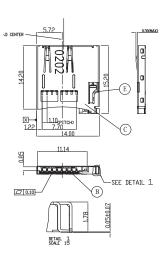
## **HTCM03AA03**

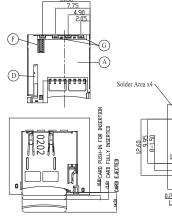


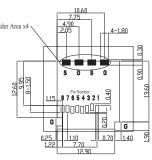
#### **SPECIFICATION**

Contact Resistance 50mΩ MAX Insulation Resistance Current Rating 0.5A MAX Card Insertion Force Operating Life 10,000 Cycles Operating Temp -40°C to +90°C

1000MΩ MIN. 500VDC 9.8N MAX







# SIM Card

# HTCY190001



**SPECIFICATION** Contact Resistance 100mΩ max

Insulation Resistance 1,000MΩ,500VDC Operating Life 5,000 Insertions Operating Temp -40°C~70°C

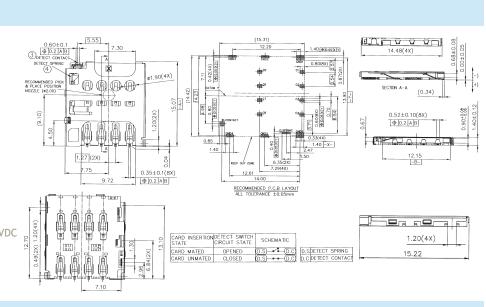
Current Rating 0.5mA AC/DC max

# HTCY190002



#### **SPECIFICATION**

Contact Resistance	100mΩ max
Insulation Resistance	1,000MΩ,100V
Current Rating	0.5A
Operating Life	500 cycles
Operating Temp	-40°C~70°C

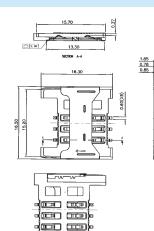


## HTCX190003

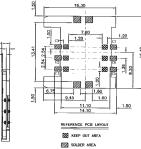


### **SPECIFICATION**

Contact Resistance 60mΩ max Insulation Resistance 1,000MΩ min Current Rating 1A Operating Life -25°C~70°C



2.70





## 1.35±0.10 LARARA L 0.90

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5.50±0.2 CARD EJECT .00±0.2 CARD

CONN CENTER

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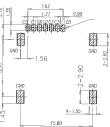
....

CARD CENTER

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THIN



# LAN<RJ45+Trans>

# HTCR0575



#### **SPECIFICATION**

Contact Resistance	50mΩ MAX
nsulation Resistance	500ΜΩΜΙΝ
Current Rating	0.5A MAX
Withstand Voltage	1000V AC
Operating Life	1,000 Cycles
Operating Temp	0°C to +70°C

## HTCR0581



### SPECIFICATION

Contact Resistance	50mΩ MAX
Insulation Resistance	500ΜΩΜΙΝ
Current Rating	0.5A MAX
Withstand Voltage	1000V AC
Operating Life	1,000 Cycles
Operating Temp	0°C to +70°C

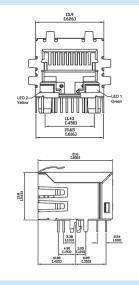
## HTCR0581-2

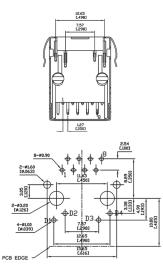


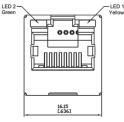
#### **SPECIFICATION**

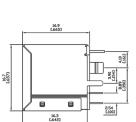
Contact Resistance	50
nsulation Resistance	50
Current Rating	1.5
Withstand Voltage	10
Operating Life	1,(
Operating Temp	-0

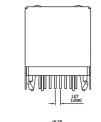
50mΩ MAX 500MΩMIN 1.5A MAX 1000V AC 1,000 Cycles 0°C to +70°C

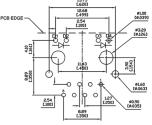


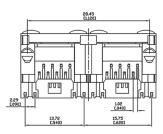




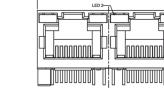


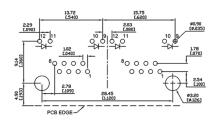






15.0 [.591]





31.5 [1.240]

2.54 [.100]

4.90

13.2 [.520]

**IDMI** 

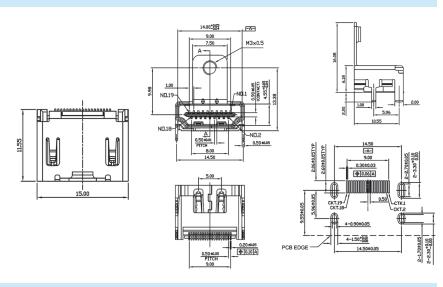
## **HTCH03AA01**



#### **SPECIFICATION**

Contact Resistance 30mΩ MAX Insulation Resistance 100MΩ MIN Current Rating 0.5A MIN Withstand Voltage 500VAC

Operating Life 10,000 Cycles Operating Temp -25°C to +70°C



## HTCHN031101003



#### **SPECIFICATION**

Contact Resistance	30mΩ MAX
sulation Resistance	100MΩ MIN
Current Rating	0.5A MIN
Withstand Voltage	500VAC
Operating Life	10,000 Cycles
Operating Temp	-25°C to +70°C

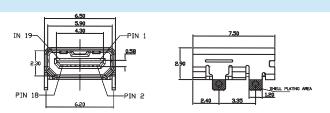
#### 10.50+0.04 7.20 |2.50<sup>±883</sup> N□.19¬ \_\_\_\_\_ 19-0.40 -C0.15 hannal ┮ -ND.1 1.22 6.30 SECTION B-B 10.85 11.20 1.02 1 Α-19-0.40 1.25 0 0 4-0.65 H B Ø (0)Q\_\_\_\_\_ $\bigcirc$ n 1.40 A \_ 0.16 SECTION A-A 0.40 (3) HDMI RECEPTACLE, TYPE C-PCB EDGE COMPONENT SIDE (PCB LAYOUT)

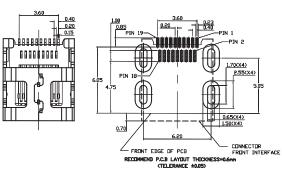
# HTCHC030001



#### **SPECIFICATION**

Contact Resistance 10mΩ MAX Insulation Resistance 100MΩ MIN Current Rating 0.5A MIN Withstand Voltage 300VAC Operating Life 10,000 Cycles Operating Temp -25°C to +70°C





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# **USB**

# **HTCU03AA01**



#### **SPECIFICATION**

Contact Resistance	
Insulation Resistance	
Current Rating	
Withstand Voltage	
Operating Life	
Operating Temp	

#### 1.8A MAX 100VAC 1,500 Cycles -20°C to +70°C

30mΩ MAX

100MΩ MIN

## **HTCU05AA02**



## 13.10 12.40 旧 3

12.50

15.40

7 7 <u> – – – –</u>

12.50

BB

12.80

14.5

1.77

1.20

0.30

6,99±0,25

<u>20</u> 1.50 2.10

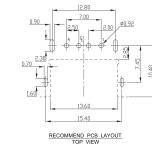
2

T=0.30(Shell)

U

-C

7,12±0,25

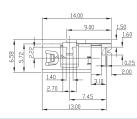


0.90

0.30

8.00

-PCB EDGE



# **HTCU03AA03**

Operating Temp -20°C to +70°C

Contact Resistance 30mΩ MAX

1000MΩ MIN

1,500 Cycles

1.5A MAX

1000VAC

**SPECIFICATION** 

Current Rating

Withstand Voltage Operating Life

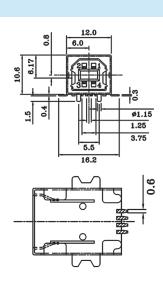


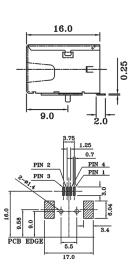
#### **SPECIFICATION**

 
 Contact Resistance
 50mΩ MAX

 Insulation Resistance
 1000MΩ MIN

 Current Rating
 1.5A MIN
 Withstand Voltage 500VAC Operating Life 1,500 Cycles Operating Temp -55°C to +85°C





# **Micro USB**

# **HTCI03AA01**



### **SPECIFICATION**

- Contact Resistance 30mΩ MAX Insulation Resistance 1000MΩ MIN Current Rating 1.5A MAX Withstand Voltage 100VAC Operating Life 10,000 Cycles Operating Temp -20°C to +85°C

## **HTCI03AA02**



### **SPECIFICATION**

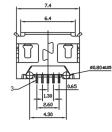
Contact Resistance	30mΩ MAX
Insulation Resistance	1000MΩ MIN
Current Rating	1.5A MAX
Withstand Voltage	100VAC
Operating Life	10,000 Cycles
Operating Temp	-20°C to +85°C

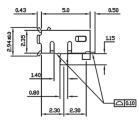
## **HTCI03AA03**



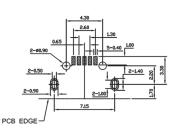
### **SPECIFICATION**

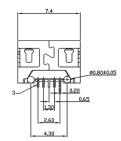
Contact Resistance 30mΩ MAX Insulation Resistance100MΩ MINCurrent Rating1.8A MAX Withstand Voltage 100VAC Operating Life 10,000 Cycles Operating Temp -20°C to +85°C











5.0

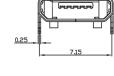
Λ

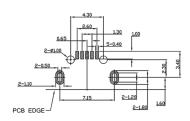
2.35

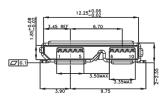
0.80

0.50

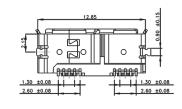
0.10

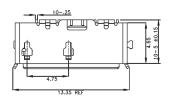


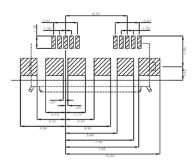




2.30 2.30







#### C07

# **DC** Jack

# **HTJC17AA01**

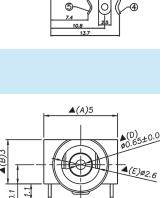


#### **SPECIFICATION**

Contact Resistance	≤30mΩ MAX
Insulation Resistance	≥100MΩ MIN
Card Insetion Force	3-30N
Withstand Voltage	500VAC
Operating Life	5,000 Cycles
Operating Temp	-20°C to +70°C

## **HTJC17AA02**





11±0.2 6.5±0.2

2.5

5±0.

6

⊕ T

3.9±0.2

▲(G)1.5

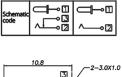
**▲**(I)3.6

16.3±0.2 PIN±0.03

3

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#### (D) Ø0.65±0.03 ▲(B)3 ▲(C)1.3±0.1 1.1 <u>3-0.2±0.1</u> ▲(F)4.2±0.25

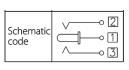
**▲**(H)8

Ш

0.7±0.1

-1±0.1

▲(J)2.45



Terminal NO.

12

### **SPECIFICATION**

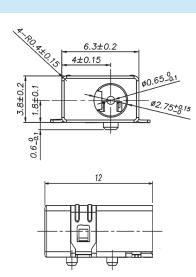
≤30mΩ MAX
≥100MΩ MIN
3-30N
500VAC
5,000 Cycles
-20°C to +70°C

## **HTJC17AA03**

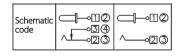


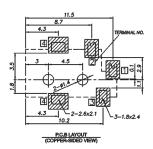
#### **SPECIFICATION**

Contact Resistance≤30mΩ MAXInsulation Resistance≥100MΩ MIN Card Insetion Force 3-30N Withstand Voltage 500VAC Operating Life 5,000 Cycles Operating Temp -20°C to +70°C









# Phone Jack

# **HTJP17AA01**



#### **SPECIFICATION**

Contact Resistance	≤30mΩ MAX
Insulation Resistance	≥100MΩ MIN
Card Insetion Force	3-25N
Withstand Voltage	500VAC
Operating Life	5,000 Cycles
Operating Temp	-20°C to +70°C

## **HTJP17AA02**



## ▲(A)6.0 (D)Ø3.6±0.05 ▶(B)5.0 0.12 ►(C)2.5±0.15 3–'7.5

**▲**(F)11.5

(H)6.0±0.2

10. 10 2-0.6

▲(A)7.2±0.2 ▲(B)6±0.2 <u>3.25\_ρ.95</u>

**▲**(E)8.6

**▲**(G)12

C l

0.35

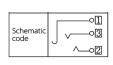
1.45

**▲(E)** 2.5±0.15

▲(G)2.5±0.15

(C)5±0.2► 4.05 ► (D)3.3±0.2 55. (F)\$2.6±0.05

▲ ∠\_\_\_\_\_\_0.08



03 02 04

^

面 2.9

.15

3

П

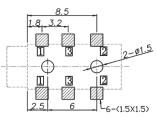
2.5

11.5

P.C.B LAYOUT (COPPER-SIDED VIEW)

6x1.5

324



P.C.B LAYOUT (COPPER-SIDED VIEW)

#### **SPECIFICATION** Contact Resistance <30mΩ MAX

contact nesistance	
Insulation Resistance	≥100MΩ MIN
Card Insetion Force	3-30N
Withstand Voltage	500VAC
Operating Life	5,000 Cycles
Operating Temp	-20°C to +70°C

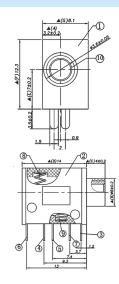
## **HTJP17AA03**

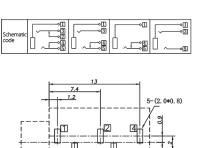


### **SPECIFICATION**

Contact Resistance ≤30mΩ MAX Insulation Resistance ≥100MΩ MIN Card Insetion Force 3-30N 
 Withstand Voltage
 500VAC

 Operating Life
 5,000 Cycles
 Operating Temp -20°C to +70°C





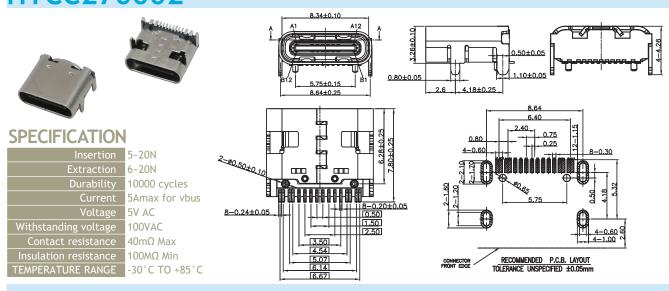
ЪЩ

P.C.B LAYOUT (COPPER-SIDED VIEW)

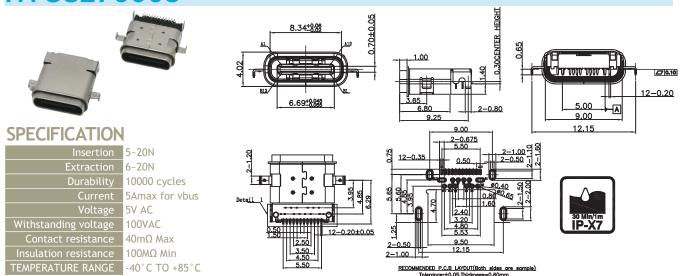
45

# TYPE-C

## HTCC270002



## HTCC270003



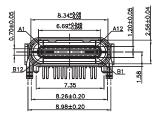
## HTCC270005

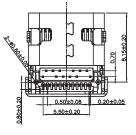


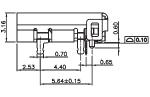
# <u>nn</u>

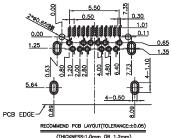
#### **SPECIFICATION**

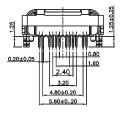
Insertion5-20NExtraction6-20NDurability10000 cyclesCurrent3Amax for vbusVoltage5V ACWithstanding voltage100VACContact resistance40mΩ MaxInsulation resistance100MΩ MinTEMPERATURE RANGE-40°C TO +85°C





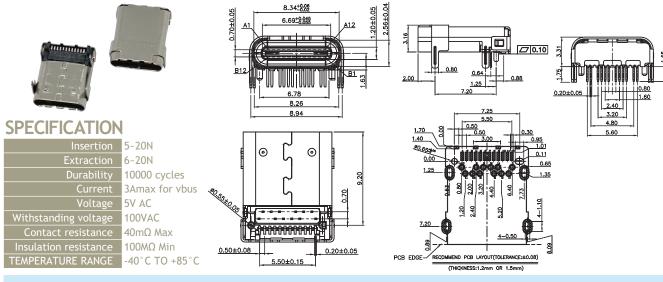




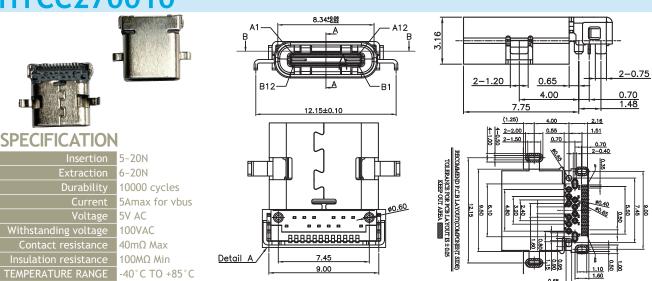


# CONNECTOR PE-C

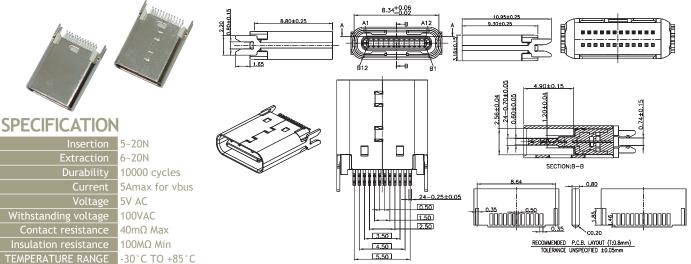
## HTCC270009



## HTCC270010



## HTCC270011



# TYPE-C

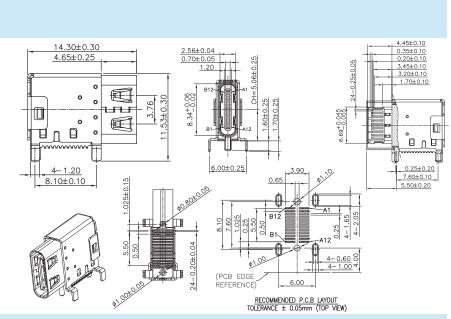
## HTCC270012

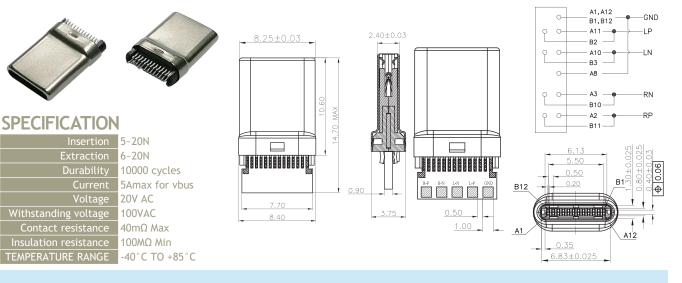


#### SPECIFICATION

Insertion	5~20N
Extraction	6~20N
Durability	10000 cycles
Current	5Amax for vbus
Voltage	20V AC
Withstanding voltage	100VAC
Contact resistance	40mΩ Max
Insulation resistance	100MΩ Min
TEMPERATURE RANGE	-40°C TO +85°C

## HTCC270013





## HTCC270014



 Voltage
 20V AC

 Withstanding voltage
 100VAC

 Contact resistance
 40mΩ Max

 Insulation resistance
 100MΩ Min

 TEMPERATURE RANGE
 -40°C TO +85°C

