# **CUI** DEVICES

**date** 11/03/2021

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SERIES: TS04 | DESCRIPTION: TACTILE SWITCH

#### **FEATURES**

- surface mount
- black actuator





#### **SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
rated voltage		1		12	Vdc
rated current		0.01		50	mA
withstanding voltage	for 1 minute		250		Vac
contact resistance	applying load of 2 times operating force at 5 Vdc, 10 mA 100			mΩ	
insulation resistance	at 100 Vdc for 1 minute	100			МΩ
operating force	see force table				
actuator travel		0.15	0.25	0.35	mm
operating temperature		-30		80	°C
storage temperature		-40		90	°C
life	rated load, 2 cycles/second, 1.5 times operating force 100 gf models 160 gf models 260 gf models	nes operating force 100,000 80,000 60,000		cycles cycles cycles	
vibration	10~55~10 Hz, 1.5 mm amplitude, 2 hours on each XYZ				
flammability rating	see material table				
RoHS	yes				

#### **PART NUMBER KEY**

<u>TS04 - 66</u> - <u>XX</u> - BK - <u>XXX</u> - SMT

Base Number

Actuator Height: Push Force:

43 = 4.3 mm \*73 = 7.3 mm 100 = 100 gf
50 = 5.0 mm 75 = 7.5 mm 160 = 160 gf
55 = 5.5 mm 85 = 8.5 mm 260 = 260 gf

65 = 6.5 mm 95 = 9.5 mm

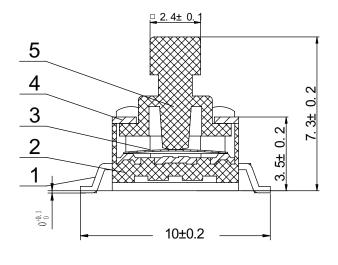
70 = 7.0 mm

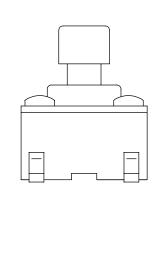
Note: \*7.3 mm height versions have square actuator top. All other models have round actuator top.

### **MECHANICAL DRAWING (7.3 MM HEIGHT MODELS)**

units: mm tolerance: ±0.2 mm unless otherwise noted

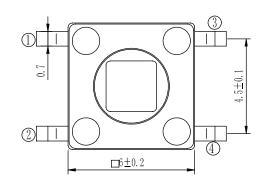
ITEM	DESCRIPTION	MATERIAL	PLATING/COLOR
1	terminals	brass	silver
2	case	PA66 (UL94HB)	black
3	contacts	stainless steel	silver
4	cover	stainless steel	
5	stem	PA66 (UL94HB)	black

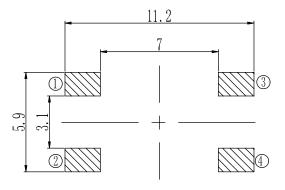




ACTUATOR POSITION (): MOMENTARY				
NORMAL	DOWN			
OFF	(ON)			
SCHEMATIC				
1) (	(3)			
2	4			

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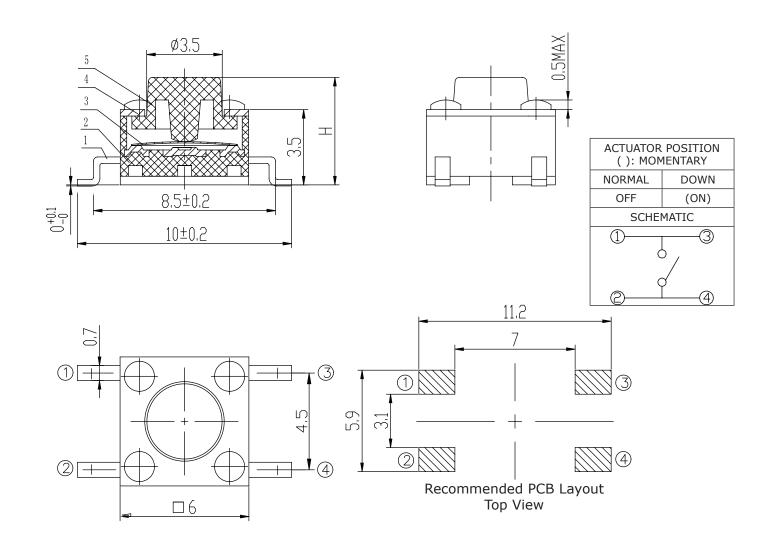
Recommended PCB Layout Top View

Operting Force Table				
Model	Press Force (N)	N) Return Force (N)		
100	1.0±0.3	>0.2		
160	1.6±0.5	>0.2		
260	2.6±0.5	>0.2		

## **MECHANICAL DRAWING (ALL OTHER HEIGHT MODELS)**

units: mm tolerance: ±0.2 mm unless otherwise noted

ITEM	DESCRIPTION	MATERIAL	PLATING/COLOR
1	terminals	brass	silver
2	case	PA66 (UL94HB)	black
3	contacts	stainless steel	silver
4	cover	stainless steel	
5	stem	PA66 (UL94HB)	black

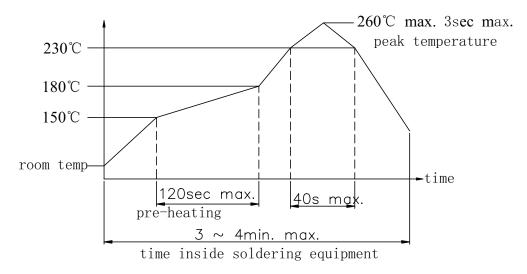


Operting Force Table			
Model	Press Force (N) Return Force (N)		
100	1.0±0.3	>0.2	
160	1.6±0.5	>0.2	
260	2.6±0.5	>0.2	

#### **SOLDERABILITY**

parameter	conditions/description	min	typ	max	units
hand soldering	for maximum 3 seconds			350	°C
reflow soldering <sup>1</sup>	see reflow profile			260	°C

Notes: 1. Do not exceed 2 reflow cycles.



#### **PACKAGING**

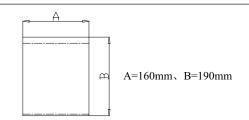
units: mm

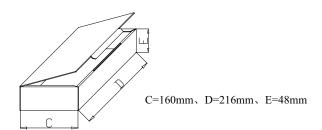
Bag Size: 190 x 160 mm

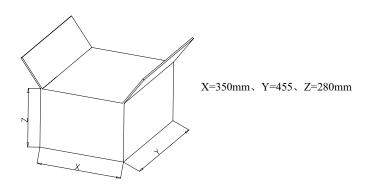
Carton Box Size: 445 x 350 x 280 mm

Bag QTY: 1,000 pcs per bag

Carton Box QTY: 60,000 pcs per carton







Additional Resources: Product Page | 3D Model | PCB Footprint

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#### **REVISION HISTORY**

rev.	description	date
1.0	initial release	09/20/2021
1.01	added 7.3 mm height model drawing	11/03/2021

The revision history provided is for informational purposes only and is believed to be accurate.

# **CUI** DEVICES

CUI Devices offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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**Authorized Distributor** 

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### **CUI Devices:**

TS04-66-43-BK-100-SMT TS04-66-43-BK-160-SMT TS04-66-43-BK-260-SMT TS04-66-50-BK-100-SMT TS04-66-55-BK-260-SMT TS04-66-55-BK-160-SMT TS04-66-55-BK-160-SMT TS04-66-55-BK-260-SMT TS04-66-55-BK-160-SMT TS04-66-55-BK-160-SMT TS04-66-70-BK-100-SMT TS04-66-70-BK-100-SMT TS04-66-70-BK-100-SMT TS04-66-70-BK-100-SMT TS04-66-73-BK-160-SMT TS04-66-73-BK-160-SMT TS04-66-73-BK-160-SMT TS04-66-73-BK-160-SMT TS04-66-75-BK-160-SMT TS04-66-75-BK-160-SMT TS04-66-85-BK-100-SMT TS04-66-85-BK-100-SMT TS04-66-85-BK-100-SMT TS04-66-85-BK-100-SMT TS04-66-85-BK-160-SMT TS04-66-85-BK-160-SMT TS04-66-95-BK-160-SMT TS04-66-95-BK-160-SMT