

# **Momentary Subminiature PCB Switch**



#### **DESCRIPTION**

A 2-pole subminiature PCB mounting Momentary Action push switch.

#### **DISTINCTIVE FEATURES**

- PCB mounting
- Subminiature size
- Momentary Action type
- Non-Lock Type
- · Non-shorting contacts

#### **APPLICATIONS**

Suitable for various switching purposes in all home electronic equipment and industrial electronic equipment.











# **ELECTRICAL SPECIFICATION**

Maximum contact voltage	30V DC
Maximum current	100mA
Contact resistance	40mΩ max
Insulation resistance	100MΩ min (Test conditions 500V DC)
Dielectric strength	500V AC for 1 minute



### **GENERAL SPECIFICATION**

	Momentary Subminiature PCB mounting switch
Contact Configuration	DPDT
RoHS Compliant	Yes



# **MATERIALS**

Part Name	Material	Quantity per switch (see drawing)
Spring Stopper	Steel	1
Spring	Stainless steel	1
Cover	PA66-101L grey	1
Base frame	PA66 grey	1
Actuator	PA66-101L white	1
Clip	Phosphor Bronze	2
Terminal board	PA66-70G33L grey	1
Terminal	Brass with silver plating	2





# **ENVIRONMENTAL/OPERATING SPECIFICATION**

Operational temperature	-40°C to + 85°C
Electrical life	10,000 cycles
Mechanical life	10,000 cycles
Operating force	250 gf +/- 150
Lock travel	2.0mm ± 0.3
Total travel	3.0mm ± 0.3
Contact timing	Non shorting type
Resistance of soldering heat	<ul> <li>Manual soldering: 300±5°C in 3 seconds</li> <li>Dip soldering: 260±5°C in 3 seconds</li> </ul>
Durability test (operating life without load test after 10,000 cycles)	<ul> <li>Contact resistance: 40mΩ max.</li> <li>Operating force: within the range ±30% of operating force specification</li> <li>Insulation resistance and Dielectric strength shall meet the requirements in the electrical specification</li> </ul>

Item	Test Conditions	Criteria	
Robustness of terminal	Static load of 500gf applied for one minute	Terminals may be bent, but loosened terminal or damage to the board is not permitted	
Robustness of actuator	Static load of 5Kgf applied in operating direction for one minute	Actuator broken or any visible damage to switch construction is not permitted	
Solderability	(260 +/- 5°C in 3 seconds)	Solder coverage 75% min.	
Enviromental performance (cold)	-40°C +/- 2°C for 96 hours	It should meet requirements of the electrical performance     Mechanical performance should remain normal	
Enviromental performance (dry heat)	85°C +/- 2°C for 96 hours	<ul> <li>Contact resistance should be less than 50mΩ</li> <li>It should meet requirements of the insulation resistance and the dielectric strength</li> <li>Mechanical performance should remain normal.</li> </ul>	
Enviromental performance (damp heat)	40°C +/- 2°C 90% ~ 95%rh for 96 hours	<ul> <li>Contact resistance should be less than 50mΩ</li> <li>insulation resistance should be higher than 10mΩ</li> <li>Dielectric strength should not change</li> <li>Mechanical performance should remain normal</li> </ul>	



### **TERMINALS**

Solder pins	Pitch 2.5mm
1	

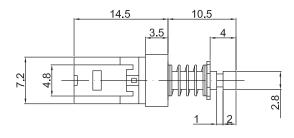




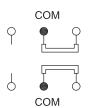
### **DIMENSIONS/DRAWINGS**

Units	mm - unless stated otherwise	
Dimensions (mm)	25 x 8 x 9.1	
Weight (grams)	1.1	

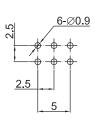


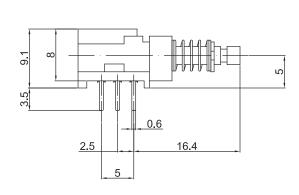


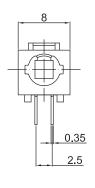
**SCHEMATIC** 



P.C.B. LAYOUT

























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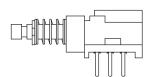




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No. Part
Spring Stopper
Spring
Cover
Base Frame
Actuator
Clip
Terminal Board

Material Material Steel Stainless Steel PA66-101L PA66 PA66-101L Phosphor Bronze PA66





### **OPTIONS** (MOQ may apply)

78-0393 Switch options	2P2T, 4P2T, 6P2T, lock and momentary versions are available
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Accessories and Associated Parts		
Part	Part number	Description
Knobs	78-0386	Black knob Suitable for use with R-TECH 78-0393 2 Pole Momentary Subminiature PCB Switch



### **PART NUMBER TABLE**

Part Number	UNSPSC	EAN	Country Of Origin
78-0393	39122216	5053556008551	China



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