



Product Specification

Part Number TC-06104-00

1) Rating: DC 12V 50mA

2) Operating Temperature Range: -10°C ~ +60°C

3) Electrical Performance:

	Test Conditions	Performance
Contact Resistance	Measured at small current (10mA	100m $Ω$ Max.
	1000Hz or less)	
Insulation Resistance	Shall be measured by applying	
	500V DC, between all terminals	$100 \mathrm{M}\Omega$ Min.
	and between the terminals and the	
	frame for 1minute±5sec.	
Dielectric Strength	AC 250v rms (50-60Hz) for 1	
	minute trip current: 0.5 mA	Without damage to parts arcing or breakdown
	 Between Terminals 	
	Between individual	
	terminals and frame	

4) Mechanical Performance:

	Test Conditions	Performance
Operating Force	Measuring push the top of the actuator (knob)	180gf±70gf
Terminal Strength	A static load of 300gf shall be applied to the terminal for 15 sec. in any direction.	Electrical characteristics shall be satisfied without damage of excessive looseness of terminals.
Displacement of Actuator (Knob)	A static load of 5N (500gf) shall be applied to the top of the actuator (knob) and then displacement shall be measured to the direction of the arrow.	The lever shall have no serious deformation and function is normally.
Life Test	Endurance without loading: A switch shall be subjected to 100,000 cycles at a speed of 15 to 18 cycles per minute without loading.	 (1) Contact resistance: 200mΩ Max. (2) Insulation Resistance: 50MΩ Min. (3) Withstand Voltage: AC 250V for 1 minute. (4) Operating force: Less than +10% ~-30% of initial operating force (5) Without damage to parts arcing or breakdown ect.



5) **Environmental Characteristics:**

	Test Conditions	Performance		
Soldering Test	The top of terminals shall be	The area of soldering should be		
	dipped 2mm in the solder bath of	over 75%		
	255 ± 5 °C for 3 ± 0.5 seconds.			
Soldering heat resistance	Solder bath method: Solder			
	temperature 260±5°C. Immersion			
	time within 10 seconds.			
	Immersion depth up to the surface			
	of the board 0.8mm dimensions	Without deformation of case or		
	of component holes in the printed	excessive looseness of terminals		
	wiring board shall being	electrical characteristics shall be		
	accordance with those specified	satisfied		
	in this specification.			
	Solder Iron method:			
	Temperature of solder 350±10°C.			
	Time of solder 3 ± 0.5 seconds.			
	The switch shall be stored at a			
	temperature of -25±3°C for 48			
	hours, then the switch shall be			
Cold test	maintained at standard			
	atmospheric conditions for hour			
	after which measurement shall be			
	made	There shall be no deformation or		
	The switch shall be stored at a	cracks in molded part		
	temperature of 70±2°C for 48			
Heat test	hours, then the switch shall be			
	maintained at standard			
	atmospheric conditions for hour			
	after which measurement shall be			
	made			
	The switch shall be stored at a			
	temperature of 40±2° and a			
	humidity of 90% to 95% for 48			
Humidity test	hours, then the switch shall be	There shall be no deformation or		
	maintained at a standard	cracks in molded part.		
	atmospheric conditions for 1 hour			
	after which measurement shall be			
	made	<u> </u>		
Test Condition (Unless otherwise specified)				
Temperature: 5°C - 35°C				
Humidity: 45% - 85% R.H.				
Pressure: 86-106kPa				