

Micro Switch Specification

Model Type: | Micro Switch

Customer No:

Model No: | CMI126703D26

1.General:

1-1 Configuration : SPDT

1-2 Switch rating: DC30V 0.1A

1-3 Operation temperature range:-25°C ~ 80°C

1-4 Preservative temperature range:-30°C ~ 80°C

1-5 Appearance and dimensions: See outside drawing page

1-6 Standard conditions: Unless specified, the test and

measurements shall be carried out as follows:

Ambient temperature: 5° C ~35°C Relative humidity: 45%~85% RH Air pressure: 8.600~10.600Pa

However,if doubt arises on the decision based on the meaured values under the above-mentioned conditions, the following

conditions shall be employed. Ambient temperature:20±2℃ Relative humidity:65±5% RH

Air pressure: 86-106kPa

2.PERFORMANCE

2-1 Electrical characteristics			
NO	ITEM	TEST CONDITIONS	PERFORMANCE
2.1.1	Contact resistance	Applying a static load two the actuating force to the center of the stem, measurements shall be made with a 1KHz small-current contact resistance meter.	50mΩ¸max
2.1.2	Insulation resistance	Measurements shall be made following application of DC500V potential across terminals and across terminals and frame for one minute.	100Μ Ω , min
2.1.3	Dielectric withstanding voltage	AC 500V(50Hz or 60Hz)shall be applied across terminals and across terminals and frame for one minute.	There shall be no breakdown.
2.1.4	Bounce	Lightly striking the center of the stem at a rate encountered in normal use(3to4 operations per sec)bounce shall be tested at "ON"and"OFF". 5V	Criteria: ON:10m sec max OFF:10m sec max

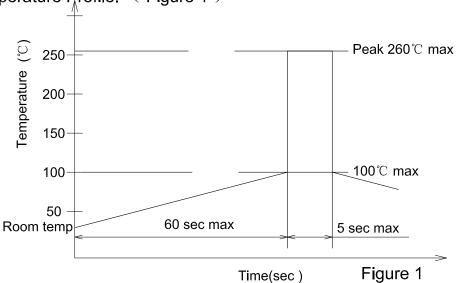
<u>Micro Switch Specification</u>					
Mode	el Type:	Micro Switch			
Custo	Customer No:				
Mode	l No:	CMI126703D26			
2-2	Mechanica	I characterstics			
NO	ITEM	TEST CONDITIONS	PERFORMANCE		
2.2.1	Operation force	Push by recommended operating condition Force OF CF RF Push Travel	See 4/4 page		
2.2.2	Operation characteristic		See 4/4 page		
2.2.3	Stop strength	Astatic load of 3 Kgf shall be applied in the direction of stem operation for a period of 60 seconds.	No damage (Electrical and mechanical)		
2.2.4	Stem strength	The maximun force to withstand a pull applied opposite to the direction of stem operation shall be measured.	500gf min		
2.2.5	Drop resistanc test	1)Height:1.5m e 2)Acceleration:80G 3)Cycles of test:3 cycles each in 6 directions, shall be satisfied.total 18 cycles.	NO 2.1and2.2.1 to 2.2.2 sha ll be satisfied.		
2.2.6	Salt Mist test	The switch shall be checked after following test: 1)Temperature: 35±5 ℃ 2)NaCl concentration: 5±1%; 3)Duration: 24 hours, 4)After immersing, salt deposit shall be removed by running water.	No remarkable corrosion shall be recognized in metal parts.		
2.2.7	Soldering heat test	`	No Damage (Electrical and mechanical)		

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2-3 Re1iabi1ity test NO Item Test Conditions Criteria				
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2.3.1 Cold test 1)Temperature:-20±2°C 2)Duration :96hours 3)Take off a drop water 4)Standard condition after Test: 1 hour 2.3.2 Heat test 1)Temperature:85±2°C 2)Duration :96hours 3)Standard conditions after Test: 1 hour 2.3.3 Temperature cycle Test 2)Standard conditions after test: 1 hour 3)1Cycle 2.3.4 Solder ability Test Test The top of the terminals shall be dipped in the solder bath at 260±5°C for 5±1 seconds. 2.3.5 Humidity test 1)Temperature:60±2°C 2)Relative humidity:9095% 3)Duration:96hours 4)Take off a drop water 5)Standard conditions after test:1hour 2.3.6 Electronics Life 1)After 2.3.4 / 2.2.7 /2.3.5 2)DC30V 0.1A Resistance load 3)Operation speed:2-3cycles/sec 4)Actuation force:150gf 5)Cycles of operation:1000,000cycles min 2.3.7 Mechanical Life 2.3.7 Mechanical Life 2.3.6 Contact resistance:200mΩ max. No2.1.2to2.1.4and2.2.1 to2.2.2shall be satisfied. Contact resistance:200mΩ max. No2.1.2to2.1.4and2.2.1 to2.2.2shall be satisfied. Contact resistance:200mΩ max. No2.1.2to2.1.4and2.2.1 to2.2.2shall be satisfied. Contact resistance:100 max. No2.1.2to2.1.3and 2.2.2 shall be satisfied.	2-3 R	eliability te	st	
2.3.2 Heat test 1)Temperature:85±2°C 2)Duration:96hours 3)Standard condition after Test: 1 hour 1)Temperature:85±2°C 2)Duration:96hours 3)Standard conditions after Test: 1 hour 2.2.2 shall be satisfied. 2.3.3 Temperature 2)Standard conditions after test: 1 hour 3)1cycle 2)Standard conditions after test: 1 hour 3)1cycle 2)Standard conditions after test: 1 hour 3)1cycle 3.3.5 Humidity 1)Test ball be dipped in the solder bath at 260±5°C for 5±1 seconds. 2.3.5 Humidity 1)Temperature:60±2°C 2)Relative humidity:90–95% 3)Duration:96hours 4)Take off a drop water 5)Standard conditions after test:1hour 2.3.6 Electronics Life 2)DC30V 0.1A Resistance load 3)Operation speed:2-3cycles/sec 4)Actuation force:150gf 5)Cycles of operation:1000,000cycles min 1,000,000 cycles of operation shall be performed continuously at a rate of 200m max. 1,000,000 cycles of operation shall be performed continuously at a rate of 200m max. No 2.1.2to2.1.4and2.2.1 to2.2.2 shall be satisfied.	NO	Item	Test Conditions	Criteria
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4)Actuation force:150gf 5)Cycles of operation:1000,000cycles min 2.3.7 Mechanical Life 1,000,000 cycles of operation shall be performed continuously at a rate of 10Ω max.		Life 	·	
5)Cycles of operation:1000,000cycles min 2.3.7 Mechanical Jife Tourned continuously at a rate of Tourned Contact resistance: 10Ω max.			, ,	
2.3.7 Mechanical 1,000,000 cycles of operation shall be performed continuously at a rate of 10Ω max.			,	2.2.2 Shall be satisfied.
2.3.7 Mechanical performed continuously at a rate of :10Ω max.			5)Cycles of operation, 1000,000cycles mili	
Z-3cycles/sec without load.	2.3.7			
2.3.8 Sulfuration The switch shall be checked after No remarkable	2.3.8	Sulfuration		No remarkable
following test: corrosion shall be			9	
1)Temperature: 35±5℃ recognized in metal			· ·	
parts.				parts.

Micro Switch Specification

Model Type:	Micro Switch
Customer No:	
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3. Wave soldering : When applying wave soldering, the peak temperature of the wave Oven should be set to 260 $^{\circ}$ C max. Condition for soldering (Wave & Non-washable Type) Temperature Profile: (Figure 1)



3.1 Wave soldering conditions

Items	Conditions
Due he estina de moneratura	Ambient temperature of the soldered surface
Preheating temperature	of PC board.100℃ max
Preheating time	60 sec max
Soldering temperature	260°C max
Continuous dipping time	5 sec max
Number of soldering	2 time max

3.2 Manual soldering

Bit temperature of soldering iron : 360±10°C Application time of soldering iron : within 3s.

4.FP、OP、OF、RF Sepecification and definition as below:

Symbol	Unit	Value	Туре
FP	mm	10.1±1.0	
OP	mm	8.4±1.0	
OF	gf	25±10	
RF	gf	10	