



## Features

- Single pole/double throw
- Compatible with most surface mount manufacturing processes
- 50 or 2000 cycle rotational life
- Tape and reel packaged
- RoHS compliant\* - see [processing information](#) on RoHS compliant surface mount components
- For switch applications/processing guidelines, [click here](#)

## 7813 SMD 3 mm Square Sealed Rotary Switch

### Electrical Characteristics

Contact Rating	
Maximum Current.....	100 mA max.
Maximum Voltage.....	16 V
Contact Timing.....	Non-shorting
Contact Resistance .....	2 ohms max.
Insulation Resistance .....	100 megohms min.
Dielectric Strength .....	250 VAC

### General Characteristics

Switch Type .....	SPDT
Operating Temperature Range .....	-55 °C to +125 °C
Storage Temperature Range .....	-55 °C to +125 °C
Seal Test.....	85 °C Fluorinert†

### Mechanical Characteristics

Positions .....	2
Adjustment Torque.....	.5 N-cm max.
Stop Strength.....	1.8 N-cm min.

### Environmental Characteristics

Shock.....	20 G
	0.1 ms max. discontinuity
Vibration .....	100 G
	0.1 ms max. discontinuity
Thermal Shock .....	(5 cycles)
	-55 °C to +125 °C

Humidity	
Insulation Resistance .....	10 megohms min.

Rotational Life	
-051 .....	50 Cycles
-023 .....	2000 Cycles

Standard Packaging	
J.....	1,000 pcs./reel
S.....	200 pcs./reel

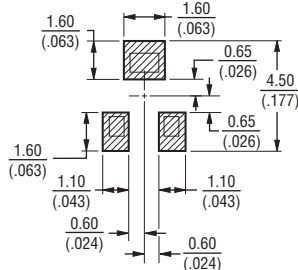
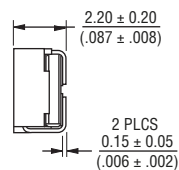
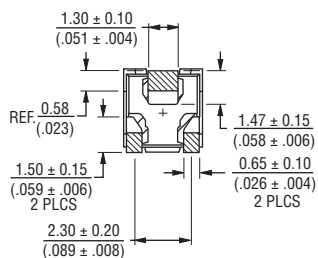
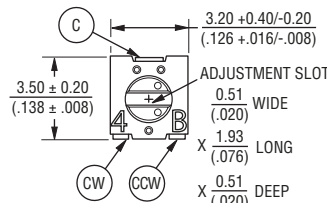
### How to Order

**7813 J - 1 - 051 E**

Model	_____
Terminal	_____
Switch Type	_____
1 = SPDT	
Rotational Life	_____
-051 = 50 Cycles	
-023 = 2000 Cycles	
Embossed Tape	_____
E = 1000 Pcs./180 mm Reel (J Style)	
S = 200 Pcs./180 mm Reel (S Style)	

### Product Dimensions

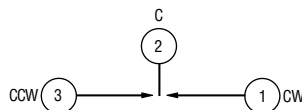
7813J



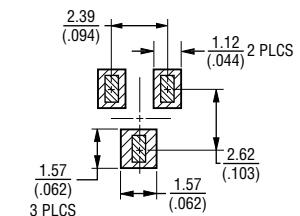
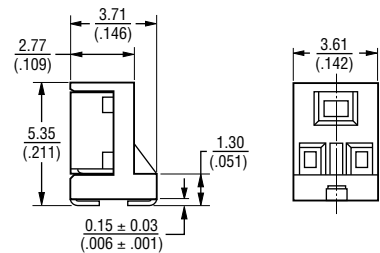
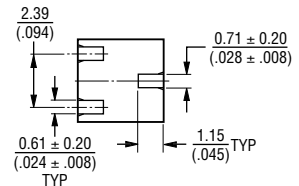
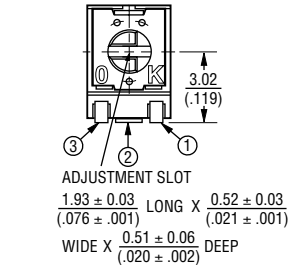
RECOMMENDED LAND PATTERN

DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

TOLERANCES:  $\pm 2$  EXCEPT WHERE NOTED.



7813S



RECOMMENDED LAND PATTERN



**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

†"Fluorinert" is a registered trademark of 3M Co.

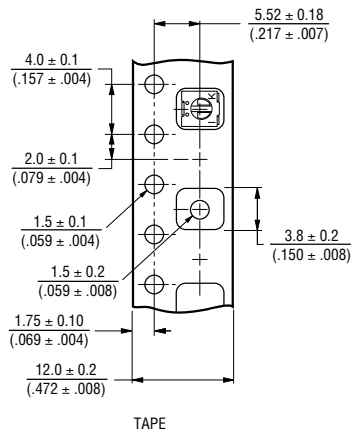
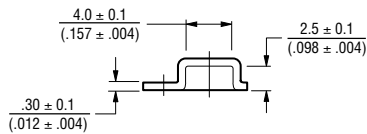
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# 7813 SMD 3 mm Square Sealed Rotary Switch

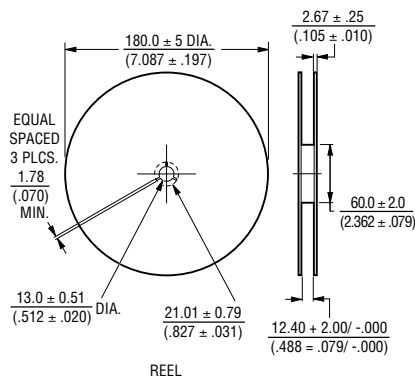
**BOURNS®**

## Packaging Specifications

7813J



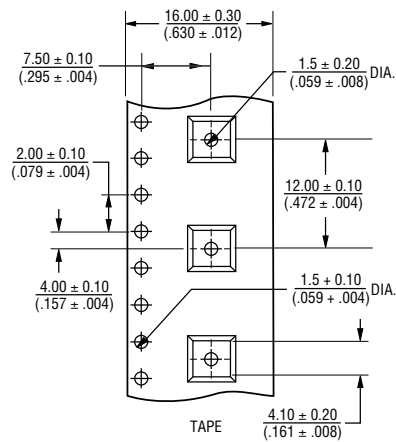
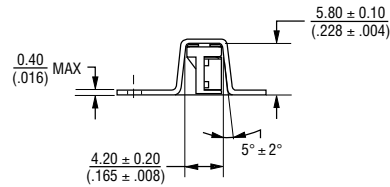
TAPE



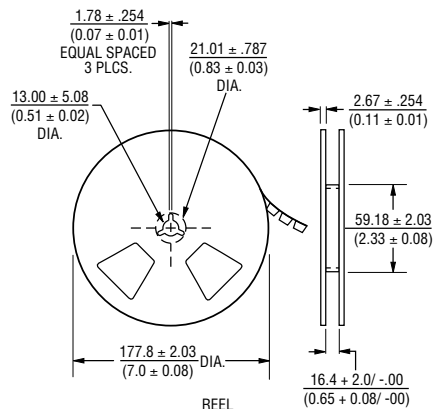
REEL

Meets EIA 481

7813S



TAPE



REEL

Meets EIA 481

DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

REV. 04/12

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Users should verify actual device performance in their specific applications.

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