



**THE DATASHEET OF  
7813J-1-051E**





## 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

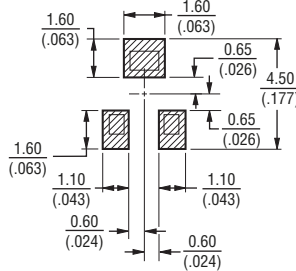
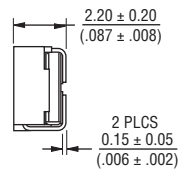
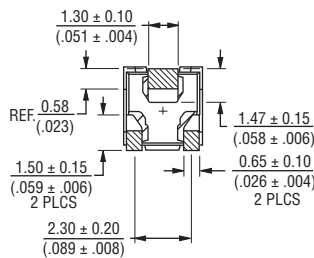
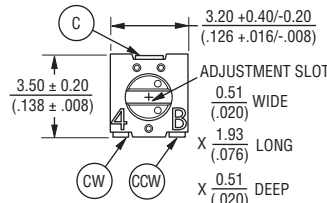
## How to Order

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)

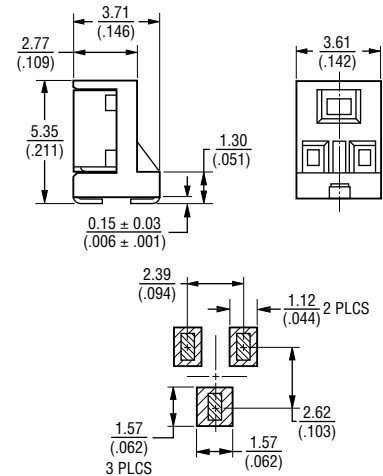
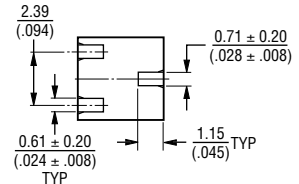
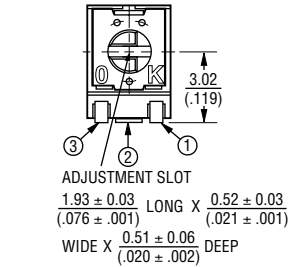
## Product Dimensions

7813J



RECOMMENDED LAND PATTERN

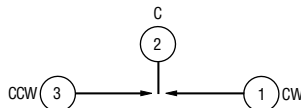
7813S



RECOMMENDED LAND PATTERN

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

TOLERANCES: ±2 EXCEPT WHERE NOTED.



**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.

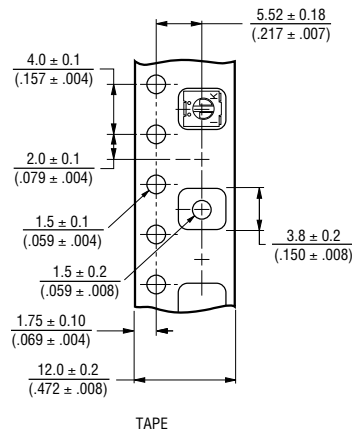
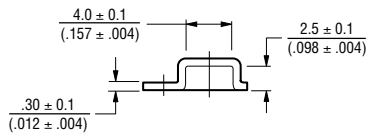
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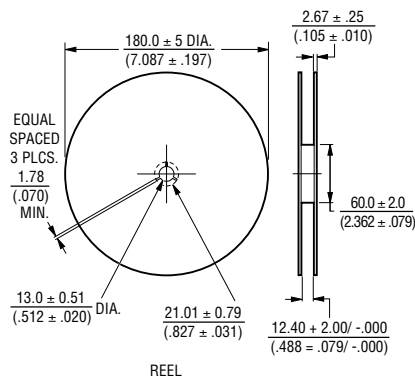
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## Packaging Specifications

7813J



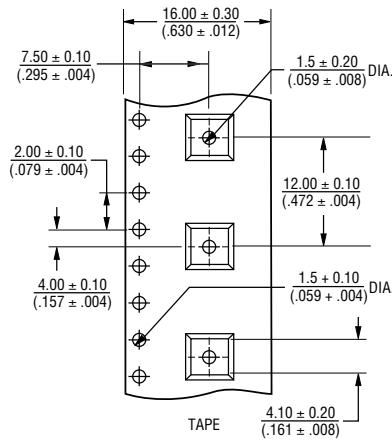
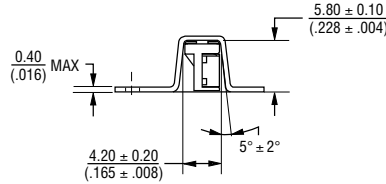
TAPE



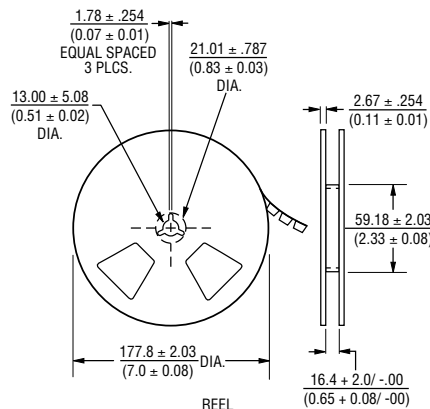
REEL

Meets EIA 481

7813S



TAPE



REEL

Meets EIA 481

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

REV. 04/12

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