

#### SURFACE MOUNT SCHOTTKY DIODES

VOLTAGE 40 Volt CURRENT 300 mA

#### **FEATURES**

- Extremely fast switching speed
- Very Low  $V_F$ : 0.325V (Typ) at  $I_F$  = 1mA
- Surface mount package ideally suited for autmatic insertion
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

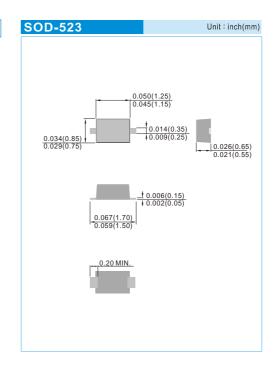


· Case: SOD-523, Plastic

• Terminals: Solderable per MIL-STD-750, Method 2026

• Appox Weight: 0.00005 ounces, 0.0014 grams

• Marking: 51



#### **ABSOLUTE RATINGS**

| Parameter                             | Symbol             | Value        | Units |
|---------------------------------------|--------------------|--------------|-------|
| Maximum Reverse DC Voltage            | V <sub>RRM</sub>   | 40           | V     |
| Peak Reverse Voltage                  | V <sub>R</sub>     | 30           | V     |
| Maximum Forward Current               | I <sub>F(AV)</sub> | 0.3          | А     |
| Power Dissipation <sup>(1)</sup>      | P <sub>TOT</sub>   | 0.2          | W     |
| Peak Forward Surge Current at t=8.3ms | IFSM               | 500          | mA    |
| Junction Temperature Range            | T                  | -55 to + 125 | °C    |
| Storage Temperature Range             | T <sub>stg</sub>   | -55 to + 125 | °C    |

#### THERMAL CHARACTERISTICS

| Parameter                                   | Symbol           | Value | Units |
|---|------------------|-------|-------|
| Thermal Resistance, Junction to Ambient (1) | R <sub>θJA</sub> | 500   | °C/W  |

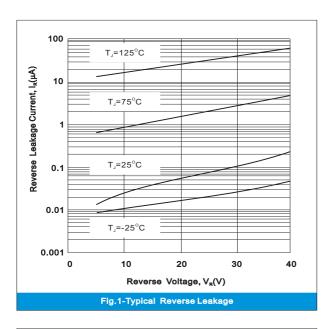
1. FR-4 Board = 70 x 60 x 1mm. Minmum Pad Layout

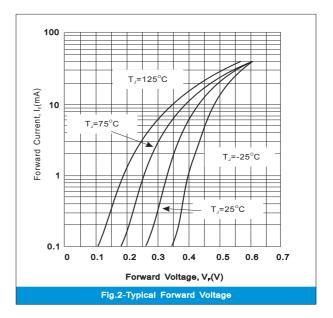


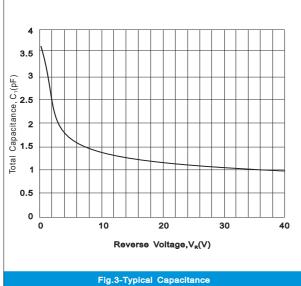
## ELECTRICAL CHARACTERISTICS ( $T_J = 25^{\circ}C$ unless otherwise noted)

| Parameter               | Symbol         | Test Condition           | MIN. | TYP. | MAX. | Units |
|-------------------------|----------------|--------------------------|------|------|------|-------|
| Reverse Leakage Current | I <sub>R</sub> | $V_R = 30V$              | -    | -    | 0.5  | uA    |
| Forward Voltage         | V <sub>F</sub> | I <sub>F</sub> =1mA      | -    | -    | 0.37 | V     |
| Total Capacitance       | C <sub>T</sub> | $V_R = 1 V, F = 1 M H_Z$ | -    | 3    | 5    | pF    |

#### **ELECTRICAL CHARACTERISTICS CURVE**

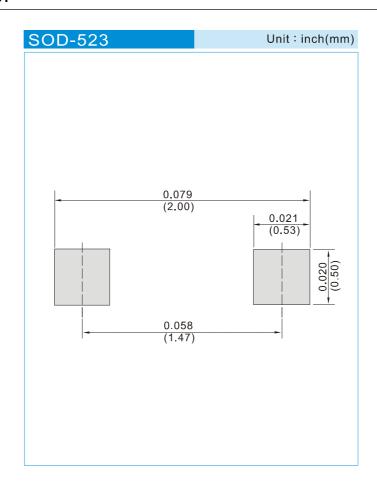








#### MOUNTING PAD LAYOUT



#### **ORDER INFORMATION**

Packing information

T/R - 12K per 13" plastic Reel

T/R - 5K per 7" plastic Reel

September 23,2016 RB751S40-REV.04S PAGE . 3



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September 23,2016 RB751S40-REV.04S PAGE . 4