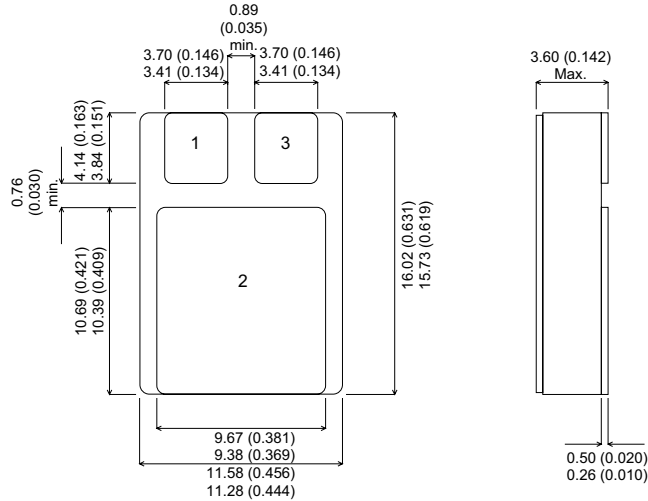


MECHANICAL DATA

Dimensions in mm



SMD1

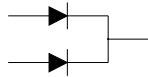
**DUAL SCHOTTKY
BARRIER DIODE IN A
SMD1 CERAMIC SURFACE
MOUNT PACKAGE
FOR HI-REL APPLICATIONS**

FEATURES

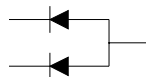
- HERMETIC CERAMIC PACKAGE
- ISOLATED CASE
- SCREENING OPTIONS AVAILABLE
- OUTPUT CURRENT 16A
- LOW V_F
- LOW LEAKAGE

ELECTRICAL CONNECTIONS

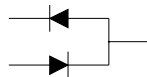
| Common Cathode | Common Anode | Series Connection |
|----------------|---------------|-------------------|
| SB16-100M-SMD | SB16-100A-SMD | SB16-100R-SMD |



1 = A₁ Anode 1
 2 = K Cathode
 3 = A₂ Anode 2



1 = K₁ Cathode 1
 2 = A Anode
 3 = K₂ Cathode 2



1 = K₁ Cathode 1
 2 = Centre Tap
 3 = A₂ Anode

ABSOLUTE MAXIMUM RATINGS ($T_{case} = 25^\circ C$ unless otherwise stated)

| | SB16-100M-SMD SB16-100A-SMD SB16-100R-SMD |
|--|---|
| V_{RRM} Peak Repetitive Reverse Voltage | 100V |
| V_{RSM} Peak Non-Repetitive Reverse Voltage | 100V |
| V_R Continuous Reverse Voltage | 100V |
| I_O Output Current | 16A |
| I_{FSM} Peak Non-Repetitive Surge Current (50Hz) | 245A |
| T_{STG} Storage Temperature Range | -55°C to 150°C |
| T_J Maximum Operating Junction Temperature | 150°C/W |

ELECTRICAL CHARACTERISTICS (Per Diode)($T_{CASE} = 25^{\circ}C$ unless otherwise stated)

| Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
|----------------------------|--------------------------------------|------|------|------|---------|
| V_F Forward Voltage | $I_F = 8A$ $T_J = 150^{\circ}C$ | | | 0.8 | V |
| | $I_F = 16A$ $T_J = 25^{\circ}C$ | | | 1.0 | |
| I_R Reverse Current | $V_R = V_{RRM}$ $T_J = 150^{\circ}C$ | | | 30 | mA |
| | $V_R = V_{RRM}$ $T_J = 25^{\circ}C$ | | | 500 | μA |
| C_d Junction Capacitance | $V_R = 5 V$ $f = 1 MHz$ | | 500 | | pF |

Pulse test $t_p=300\mu s$ $\delta \leq 2\%$

| Parameter | | Unit |
|---------------|---|---|
| $R_{TH(j-a)}$ | Maximum Thermal Resistance Junction To Case | both diodes 1.4 per diode 2.3 $^{\circ}C/W$ |
| $R_{TH(j-c)}$ | Maximum Thermal Resistance Junction To Case | 1.3 $^{\circ}C/W$ |