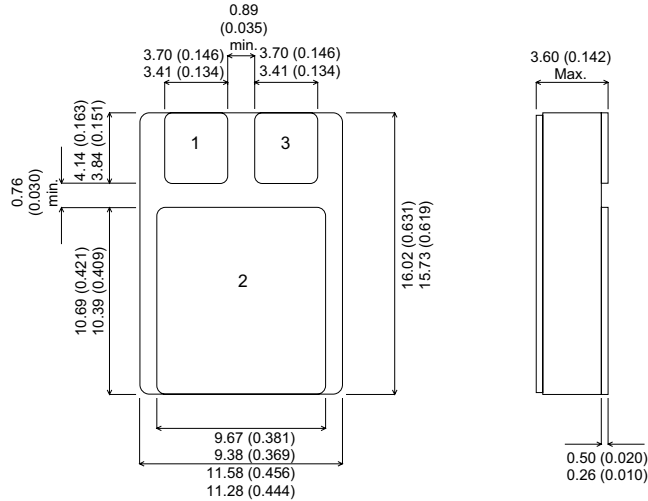


**MECHANICAL DATA**

Dimensions in mm



**SMD1**

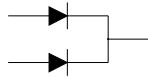
**DUAL SCHOTTKY  
BARRIER DIODE IN A  
SMD1 CERAMIC SURFACE  
MOUNT PACKAGE  
FOR HI-REL APPLICATIONS**

**FEATURES**

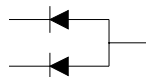
- HERMETIC CERAMIC PACKAGE
- ISOLATED CASE
- SCREENING OPTIONS AVAILABLE
- OUTPUT CURRENT 16A
- LOW  $V_F$
- LOW LEAKAGE

**ELECTRICAL CONNECTIONS**

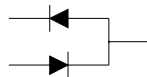
Common Cathode	Common Anode	Series Connection
SB16-100M-SMD	SB16-100A-SMD	SB16-100R-SMD



1 = A<sub>1</sub> Anode 1  
 2 = K Cathode  
 3 = A<sub>2</sub> Anode 2



1 = K<sub>1</sub> Cathode 1  
 2 = A Anode  
 3 = K<sub>2</sub> Cathode 2



1 = K<sub>1</sub> Cathode 1  
 2 = Centre Tap  
 3 = A<sub>2</sub> 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	$\mu A$
$C_d$ 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 $^{\circ}C/W$