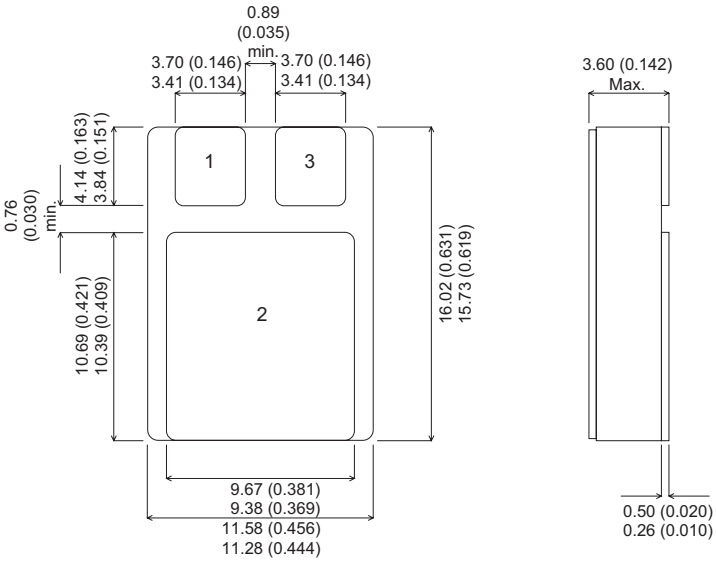
SB30-45MSMD
SB30-45ASMD
SB30-45RSMD

MECHANICAL DATA
Dimensions in mm

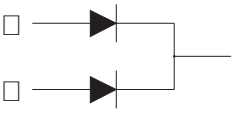
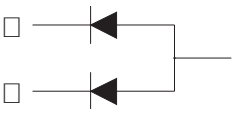
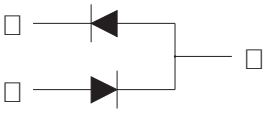


SMD1 (TO-276AB) CERAMIC PACKAGE

DUAL SCHOTTKY BARRIER DIODE IN CERAMIC SURFACE MOUNT PACKAGE FOR HI–REL APPLICATIONS

FEATURES

- **HERMETIC CERAMIC PACKAGE**
- **AVAILABLE IN COMMON CATHODE, COMMON ANODE AND SERIES VERSIONS**
- **SCREENING OPTIONS AVAILABLE**
- **OUTPUT CURRENT 30A**
- **LOW V_F**
- **LOW LEAKAGE**

Common Cathode	Common Anode	Series Connection
SB30-45M	**SB30-45A**	**SB30-45R**
		
1 = A_1 Anode 1	1 = K_1 Cathode 1	1 = K_1 Cathode 1
2 = K Cathode	2 = A Anode	2 = Centre Tap
3 = A_2 Anode 2	3 = K_2 Cathode 2	3 = A_2 Anode

ABSOLUTE MAXIMUM RATINGS (T_{case} = 25°C unless otherwise stated)

V_{RRM}	Peak Repetitive Reverse Voltage	45V
V_{RSM}	Peak Non-Repetitive Reverse Voltage	45V
V_R	Continuous Reverse Voltage	45V
$I_{F(AV)}$	Maximum Average Forward Current	30A
I_{FSM}	Peak Non-Repetitive Surge Current at 50Hz (per leg)	245A
T_{STG}	Storage Temperature Range	-55°C to 150°C
T_J	Maximum Operating Junction Temperature	150°C

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SB30-45MSMD
SB30-45ASMD
SB30-45RSMD

ELECTRICAL CHARACTERISTICS (T_{CASE} = 25°C unless otherwise stated

Parameter		Test Conditions		Min.	Typ.	Max.	Unit
V_F	Maximum Forward Voltage Drop (per diode)*	I_F = 15A	T_J = 25°C			0.6	V
		I_F = 30A	T_J = 25°C			0.75	
		I_F = 15A	T_J = 125°C			0.55	
		I_F = 30A	T_J = 125°C			0.7	
I_R	Reverse Maximum Leakage Current (per diode)*	V_R = 45V	T_J = 25°C			2	mA
		V_R = 45V	T_J = 125°C			75	
C_d	Junction Capacitance	V_R = 5 V	f = 1 MHz		900		pF

*Pulse test tp=300µs δ≤2%

	Parameter			Unit
$R_{TH(j-c)}$	Maximum Thermal Resistance Junction To Case	(per package)	1.3	°C/W
$R_{TH(j-c)}$	Maximum Thermal Resistance Junction To Case	(per diode)	2.4	°C/W

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