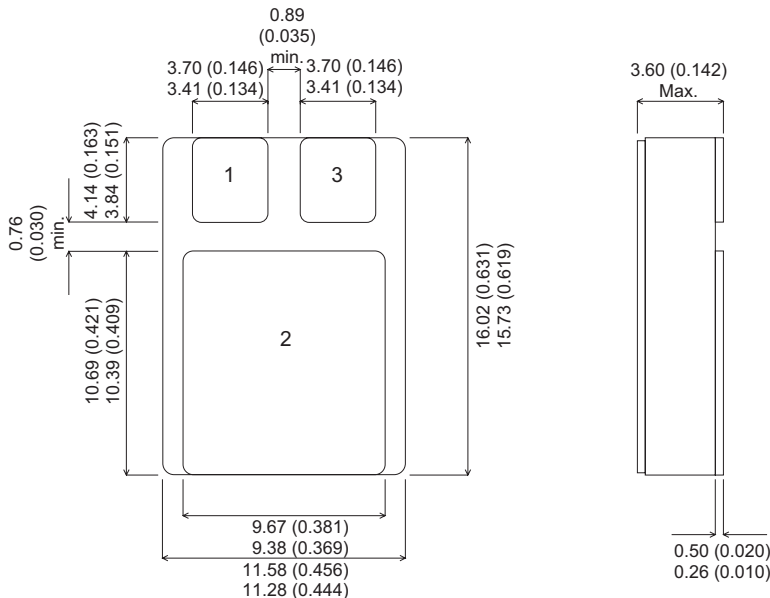


MECHANICAL DATA

Dimensions in mm



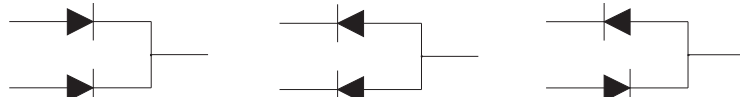
SMD1 Package (TO-276AB)

**DUAL SCHOTTKY
 BARRIER DIODE IN FOR
 HI-REL APPLICATIONS**

FEATURES

- HERMETIC CERAMIC PACKAGE
- ISOLATED CASE
- SCREENING OPTIONS AVAILABLE
- OUTPUT CURRENT 30A
- LOW V_F
- LOW LEAKAGE

Common Cathode	Common Anode	Series Connection
SB30-100M	SB30-100A	SB30-100R



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

V_{RRM}	Peak Repetitive Reverse Voltage (Per Leg)	100V
V_{RSM}	Peak Non-Repetitive Reverse Voltage (Per Leg)	100V
V_R	Continuous Reverse Voltage (Per Leg)	100V
$I_{F(AV)}$	Maximum Average Forward Current	30A
I_{FSM}^*	Peak Non-Repetitive Surge Current (per leg)	100A
T_{STG}	Storage Temperature Range	-55°C to 150°C
T_J	Maximum Operating Junction Temperature	150°C

* $t_p = 8.3ms$ half-sine

Semelab Plc reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by Semelab is believed to be both accurate and reliable at the time of going to press. However Semelab assumes no responsibility for any errors or omissions discovered in its use. Semelab encourages customers to verify that datasheets are current before placing orders.

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

Parameter	Test Conditions		Min.	Typ.	Max.	Unit
V_F Maximum Forward Voltage Drop (per diode)*	$I_F = 15A$	$T_J = 25^{\circ}C$			1.03	V
	$I_F = 30A$	$T_J = 25^{\circ}C$			1.27	
	$I_F = 15A$	$T_J = 125^{\circ}C$			0.77	
	$I_F = 30A$	$T_J = 125^{\circ}C$			0.95	
I_R Reverse Maximum Leakage Current (per diode)*	$V_R = 100V$	$T_J = 25^{\circ}C$			0.55	mA
	$V_R = 100V$	$T_J = 125^{\circ}C$			7.0	
C_T Junction Capacitance (per diode)	$V_R = 5 V$	$f = 1 MHz$		215		pF

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

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