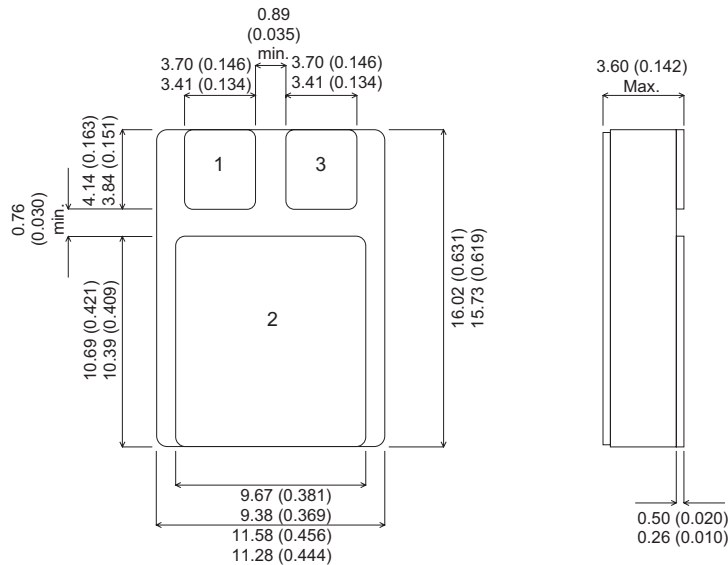


**MECHANICAL DATA**

Dimensions in mm



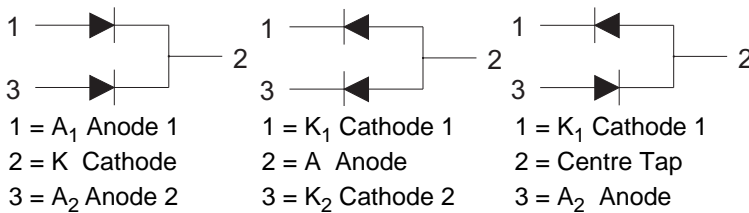
**SMD1 Package (TO-276AB)**

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

**FEATURES**

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

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



**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.

**Semelab plc.** Telephone +44(0)1455 556565. Fax +44(0)1455 552612.

E-mail: [sales@semelab.co.uk](mailto:sales@semelab.co.uk) Website: <http://www.semelab.co.uk>

Document Number 2752

Issue 4

**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
		$V_R = 100V$	$T_J = 125^{\circ}C$			9.0	
$C_T$	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)	1.3 $^{\circ}C/W$
$R_{TH(j-c)}$	Maximum Thermal Resistance Junction To Case	(per diode)	2.4 $^{\circ}C/W$