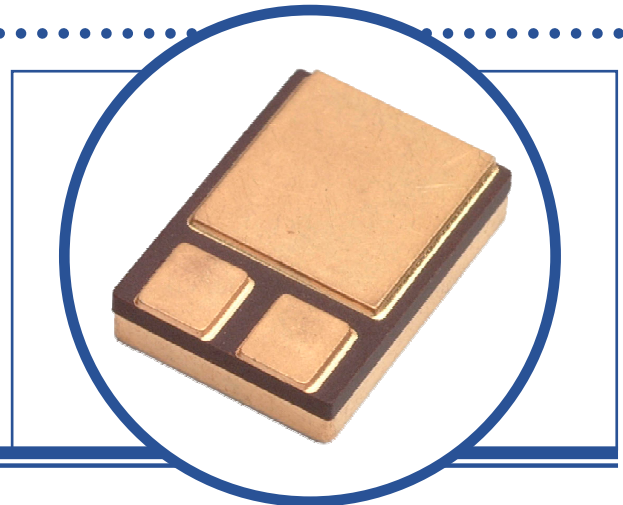


# DUAL SCHOTTKY RECTIFIER DIODE

## SB30-100MSMD

- Hermetic Ceramic Surface Mount Package (TO-267AB)
- Low Forward Voltage Drop
- Typical applications include Switching Power Supplies, Converters, Free Wheeling Diodes and Reverse Battery Protection
- Space Level and High-Reliability Screening Options Available



### ABSOLUTE MAXIMUM RATINGS (Per Diode, $T_J = 25^\circ\text{C}$ unless otherwise stated)

$V_{RRM}$	Repetitive Peak Reverse Voltage (Per Leg)	100V
$V_{RSM}$	Peak Non-Repetitive Reverse Voltage (Per Leg)	100V
$V_R$	Continuous Reverse Voltage (Per Leg)	100V
$I_{F(AV)}$	Average Forward Current	30A
$I_{FSM}$	Surge Peak Forward Current ( $t_p = 8.3\text{ms}$ half-sine)	100A
$T_{STG}$	Storage Temperature Range	$-55$ to $+150^\circ\text{C}$
$T_J$	Maximum Operating Junction Temperature	$+150^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS (Per Diode, $T_J = 25^\circ\text{C}$ unless otherwise stated)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Units
$V_{FM}^{(1)}$	Forward Voltage Drop	$I_F = 15\text{A}$ $T_J = 25^\circ\text{C}$			1.03	V
			$I_F = 30\text{A}$		1.27	
		$I_F = 15\text{A}$ $T_J = 125^\circ\text{C}$			0.77	
			$I_F = 30\text{A}$		0.95	
$I_R$	Reverse Leakage Current	$V_R = 100\text{V}$ $T_J = 125^\circ\text{C}$			0.55	mA
					9	mA
$C_J$	Junction Capacitance	$V_R = 5\text{V}$ $f = 1.0\text{MHz}$		215		pF

#### Notes

(1) Pulse Width  $< 300\mu\text{s}$ , Duty Cycle  $< 2\%$

### THERMAL PROPERTIES

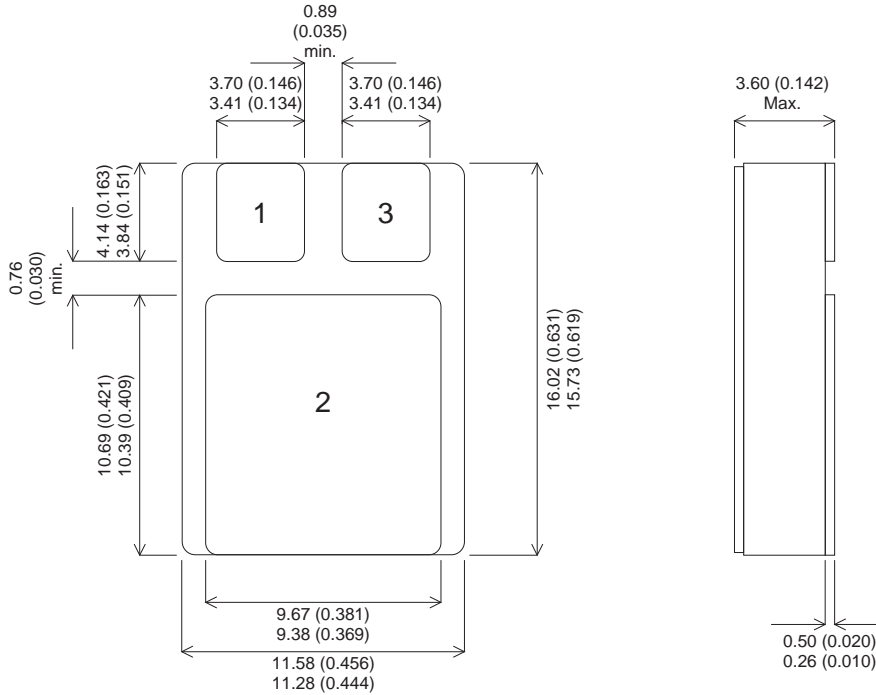
Symbol	Parameter	Max	Units
$R_{\theta JC}$	Thermal Resistance Junction to Case (per package)	1.3	$^\circ\text{C/W}$
$R_{\theta JC}$	Thermal Resistance Junction to Case (per diode)	2.4	$^\circ\text{C/W}$

Semelab Limited 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 an order.

# DUAL SCHOTTKY RECTIFIER DIODE SB30-100MSMD

## MECHANICAL DATA

Dimensions in mm (Inches)



## SMD1 (TO-276AB)

### Underside View

Pad 1 = A<sub>1</sub> Anode 1

Pad 2 = K Cathode

Pad 3 = A<sub>2</sub> Anode 2

