

TECHNICAL DATA DATA SHEET 331, REV. C

# ULTRA LOW REVERSE LEAKAGE POWER SCHOTTKY RECTIFIER Very Low Voltage Drop

DESCRIPTION: 200 VOLT, 7.5 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC SHD-1 OR -1B PACKAGE.

### **MAXIMUM RATINGS**

ALL RATINGS ARE @  $T_C$  = 25 °C UNLESS OTHERWISE SPECIFIED.

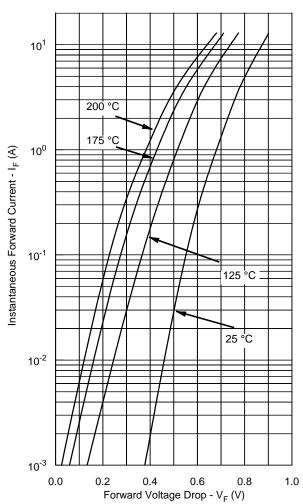
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	200	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ T <sub>C</sub> =100 <sup>O</sup> C)	Io	7.5	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT	I <sub>FSM</sub>	140	Amps
(t = 8.3ms, Sine)			
MAXIMUM JUNCTION CAPACITANCE (V <sub>r</sub> =5V) (per leg)	C <sub>T</sub>	150	pF
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R\theta_{JC}$	3.2	°C/W
MAXIMUM OPERATING TEMPERATURE RANGE	Тор	-65 to + 200	°C
MAXIMUM STORAGE TEMPERATURE RANGE	Tstg	-65 to + 175	°C

# **ELECTRICAL CHARACTERISTICS**

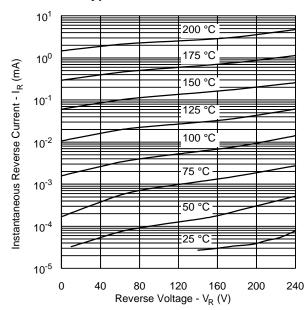
CHARACTERISTIC			
MAXIMUM FORWARD VOLTAGE DROP, Pulsed (I <sub>f</sub> = 7.5 Amps)			
T <sub>J</sub> = 25 °C	$V_{f}$	0.92	Volts
T <sub>J</sub> = 125 °C	- 1	0.76	
MAXIMUM REVERSE CURRENT (I <sub>r</sub> @ 200V PIV)			
T <sub>J</sub> = 25 °C	l <sub>r</sub>	0.05	mA
T <sub>J</sub> = 125 °C		0.5	
REVERSE RECOVERY TIME	t <sub>rr</sub>	12	ns

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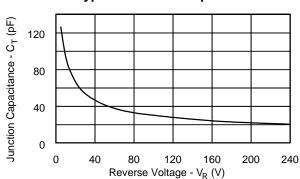
# **Typical Forward Characteristics**



# **Typical Reverse Characteristics**

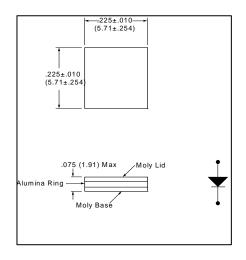


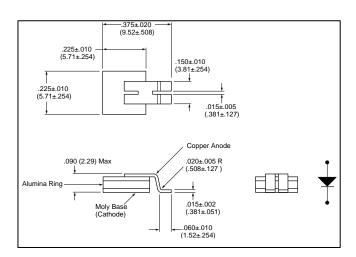
# **Typical Junction Capacitance**



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#### **MECHANICAL DIMENSIONS: In Inches / mm**





SHD-1B

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