TECHNICAL DATA DATA SHEET 455, REV. A

# HERMETIC POWER SCHOTTKY RECTIFIER Ultra Low Reverse Leakage 200°C Operating Temperature

(S-100 for JANTXV equivalent screening; SS for JANS equivalent screening available)

### **Applications:**

• Switching Power Supply • Converters • Free-Wheeling Diodes • Polarity Protection Diode

### Features:

- Ultra low Reverse Leakage Current
- Soft Reverse Recovery at Low and High Temperature
- Very Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capacity
- Guard Ring for Enhanced Durability and Long Term Reliability
- Guaranteed Reverse Avalanche Characteristics

### MAXIMUM RATINGS

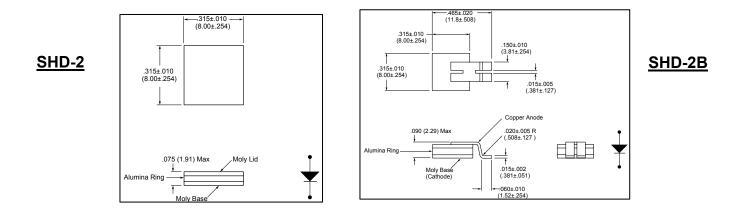
#### ALL RATINGS ARE @ T\_c = 25 °C UNLESS OTHERWISE SPECIFIED.

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	100	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_c$ =100 $^{\circ}$ C)	Ι <sub>ο</sub>	30	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (t = 8.3ms, Sine)		570	Amps
MAXIMUM JUNCTION CAPACITANCE (V <sub>r</sub> =5V) (per leg)	C <sub>T</sub>	1000	pF
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R_{ ext{ heta}JC}$	0.50	°C/W
MAXIMUM OPERATING TEMPERATURE RANGE		-65 to + 200	°C
MAXIMUM STORAGE TEMPERATURE RANGE	Tstg	-65 to + 175	°C

### ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MAX.	UNITS
$\begin{tabular}{ll} \mbox{MAXIMUM FORWARD VOLTAGE DROP, Pulsed} & (I_{f} = 30 \mbox{ Amps}) \\ T_{J} = 25 \ ^{\circ}\text{C} \\ T_{J} = 125 \ ^{\circ}\text{C} \end{tabular}$	V <sub>f</sub>	0.84 0.68	Volts
MAXIMUM REVERSE CURRENT (I <sub>r</sub> @ 100V PIV) $T_J = 25 \degree C$ $T_J = 125 \degree C$	١ <sub>r</sub>	0.20 2.0	mA

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



#### **PINOUT TABLE**

ТҮРЕ	PIN 1 (Base)	PIN 2
SINGLE RECTIFIER	CATHODE	ANODE

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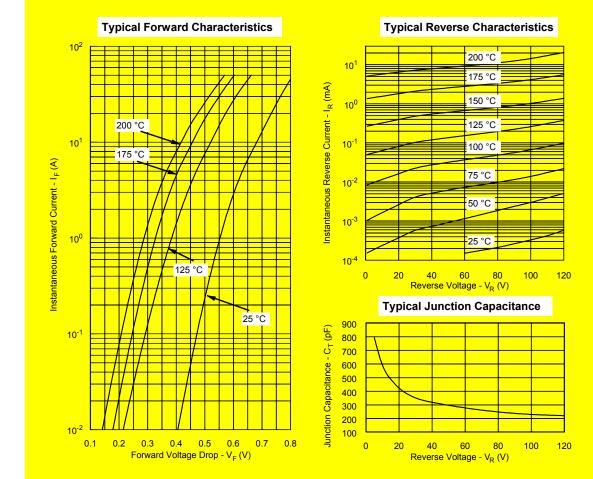
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### Curves are for die only