

TECHNICAL DATA
DATA SHEET 830, REV. –

HERMETIC POWER SCHOTTKY RECTIFIER
200°C Maximum Operation Temperature
Very Low Forward Voltage Drop

Applications:

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

Features:

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

MAXIMUM RATINGS

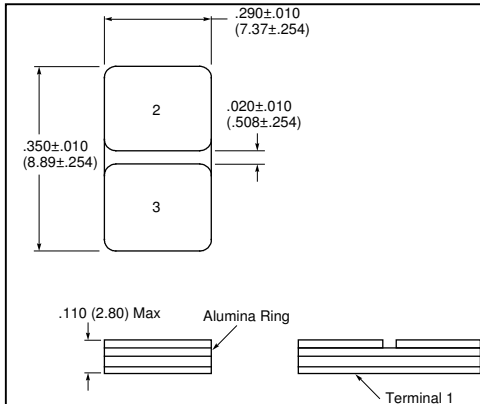
ALL RATINGS ARE @ $T_C = 25^\circ\text{C}$ UNLESS OTHERWISE SPECIFIED.

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	200	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100^\circ\text{C}$) (per leg)	I_O	15	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (t=8.3ms, Sine)	I_{FSM}	280	Amps
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode) (per leg)	$R_{\theta JC}$	0.40	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to +200	$^\circ\text{C}$
MAXIMUM STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to +175	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

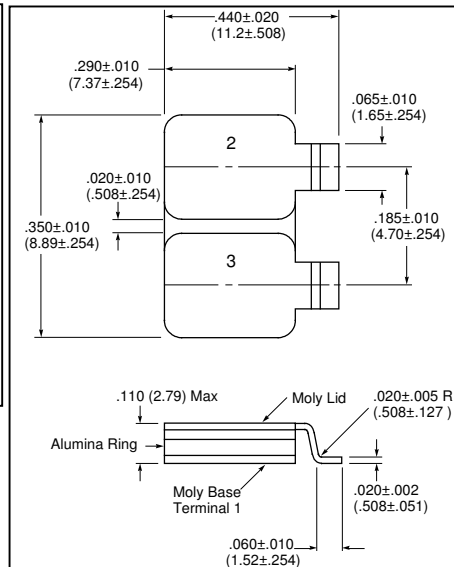
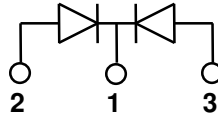
CHARACTERISTIC			
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ($I_f = 15$ Amps) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	V_f	0.92 0.76	Volts
MAXIMUM REVERSE CURRENT (I_r @ 200V PIV) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	I_r	0.35 8.0	mA
MAXIMUM JUNCTION CAPACITANCE ($V_r = 5\text{V}$)	C_T	300	pF

MECHANICAL DIMENSIONS: in inches / mm

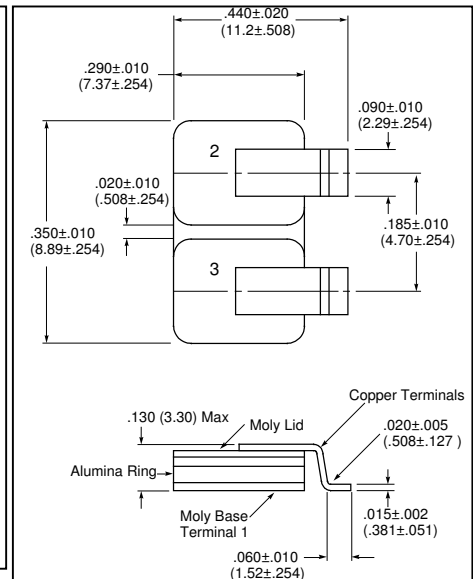


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COMMON CATHODE

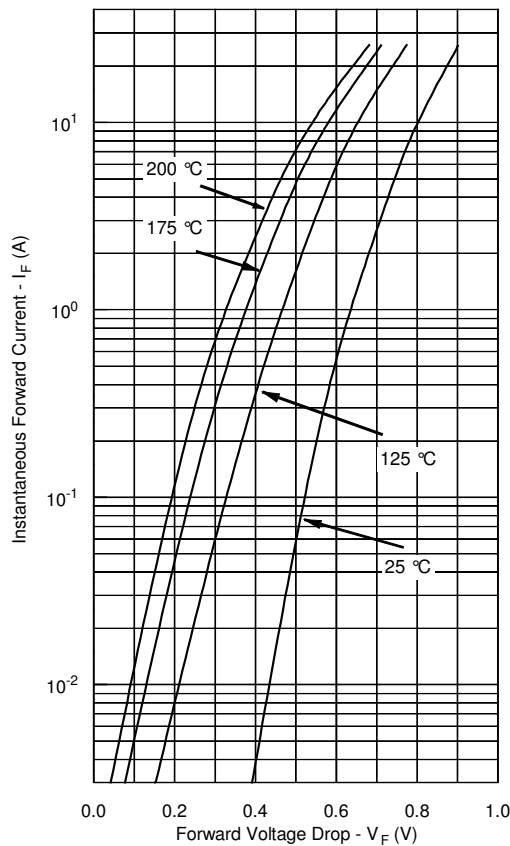


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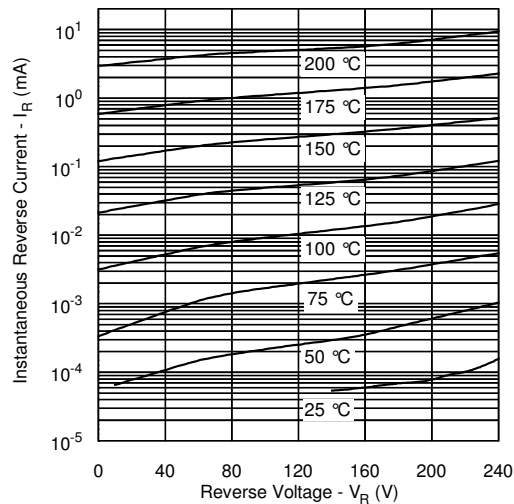


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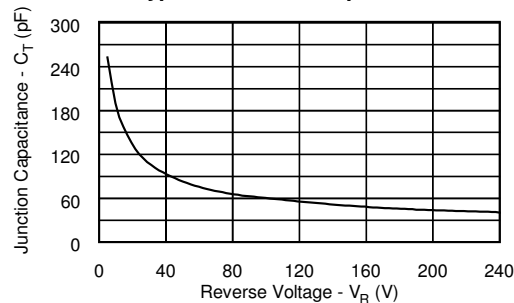
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



TECHNICAL DATA

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