TECHNICAL DATA DATA SHEET 250, REV. D

HERMETIC POWER SCHOTTKY RECTIFIER 200°C Maximum Operation Temperature

DESCRIPTION: A 100 VOLT, 120 AMP, HERMETIC POWER SCHOTTKY RECTIFIER IN A SHD-3/3A/3B PACKAGE.

MAXIMUM RATINGS

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

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RATING	SYMBOL	MAX.	UNITS	
PEAK INVERSE VOLTAGE	PIV	100	Volts	
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ T _C =100 °C)	Io	120	Amps	
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (t=10ms, Sine)	I _{FSM}	1650	Amps	
MAXIMUM JUNCTION CAPACITANCE (V _r =5V)	C _T	3000	pF	
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R\theta_{JC}$	0.20	°C/W	
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 200	°C	

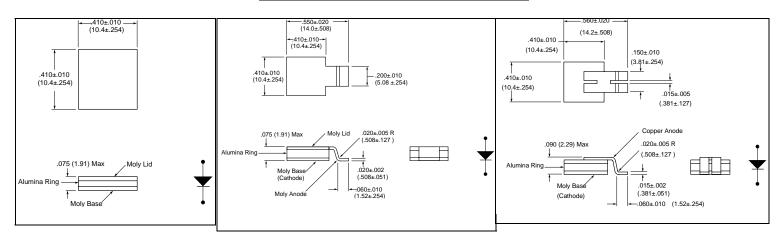
ELECTRICAL CHARACTERISTICS

CHARACTERISTIC			
MAXIMUM FORWARD VOLTAGE DROP, Pulsed (I _f = 120 Amps)			
T _J = 25 °C	V_{f}	0.87	Volts
T _J = 125 °C		0.72	
MAXIMUM REVERSE CURRENT (Ir @ 100 V PIV)			
T _J = 25 °C	l _r	2.0	mA
T _J = 125 °C		48	

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DATA SHEET 250, REV. D

MECHANICAL DIMENSIONS: In Inches / mm

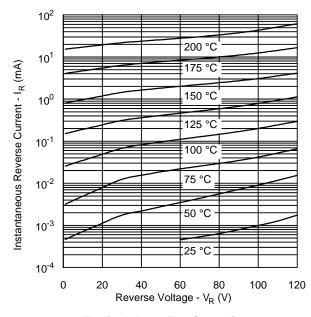


SHD-3A SHD-3B

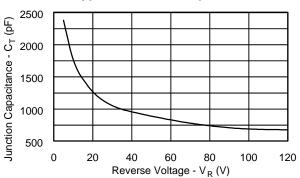
Typical Forward Characteristics

10² 200 °C °C 175 10¹ Instantaneous Forward Current - I_F (A) 10⁰ 25 °C 10⁻¹ 10⁻² 0.3 0.5 0.6 0.7 8.0 0.1 0.2 0.4 Forward Voltage Drop - V_F (V)

Typical Reverse Characteristics



Typical Junction Capacitance



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