

TECHNICAL DATA DATA SHEET 705, REV. -

HERMETIC POWER SCHOTTKY RECTIFIER 200°C Maximum Operation Temperature

DESCRIPTION: A 100 VOLT, 30 AMP, HERMETIC POWER SCHOTTKY RECTIFIER IN A SHD-3/3A/3B PACKAGE.

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 ^O C)	Io	30	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (t=10ms, Sine)	I _{FSM}	570	Amps
MAXIMUM JUNCTION CAPACITANCE (V _r =5V)	C _T	1000	рF
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R\theta_{JC}$	0.50	°C/W
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 200	°C

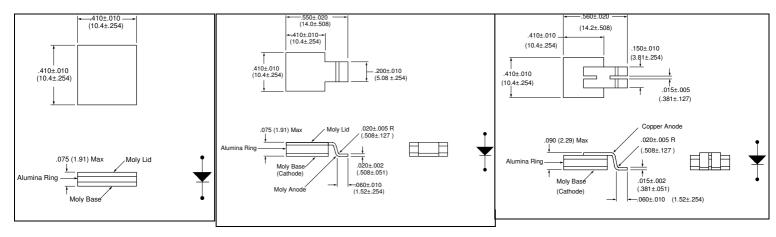
ELECTRICAL CHARACTERISTICS

CHARACTERISTIC		SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed (I _f = 30 Amps)				
	T _J = 25 °C	V_{f}	0.84	Volts
	T _J = 125 °C		0.68	
MAXIMUM REVERSE CURRENT (I _r @ 100 V PIV)				
	$T_J = 25 ^{\circ}C$	l _r	0.75	mA
	T _J = 125 °C		15	

SENSITRON

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MECHANICAL DIMENSIONS: In Inches / mm



SHD-3A SHD-3B

Typical Forward Characteristics Typical Reverse Characteristics 10² 200 ℃ 10¹ 175 ℃ Instantaneous Reverse Current - I_B (mA) 150 ℃ 10⁰ 200 ℃ 125 ℃ 10¹ 10⁻¹ 100 ℃ 175 ℃ Instantaneous Forward Current - I_F (A) 75 ℃ 10⁻² 50 ℃ 10⁻³ 10⁰ 25 ℃ 10⁻⁴ 125 ℃ 0 40 60 100 120 Reverse Voltage - V_R (V) **Typical Junction Capacitance** 25 900 Junction Capacitance - C_T (pF) 10⁻¹ 800 700 600 500 400 300 200 10⁻² 100 0.1 0.2 0.3 0.4 0.5 0.6 0.8 20 40 60 100 120 Forward Voltage Drop - $V_F(V)$ Reverse Voltage - V_R (V)



TECHNICAL DATA

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