

TECHNICAL DATA  
DATA SHEET 705, REV. A.1

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

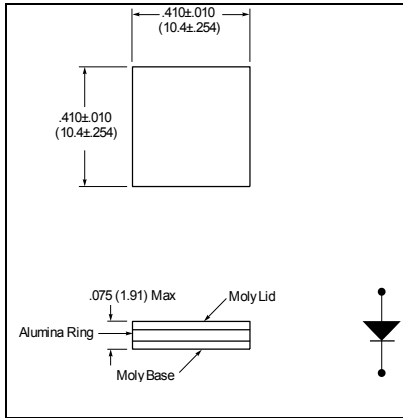
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	100	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100^\circ\text{C}$ )	$I_O$	30	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ( $t=10\text{ms}$ , Sine)	$I_{FSM}$	570	Amps
MAXIMUM JUNCTION CAPACITANCE ( $V_r=5\text{V}$ )	$C_T$	1000	pF
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R\theta_{JC}$	0.9	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 175	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS**

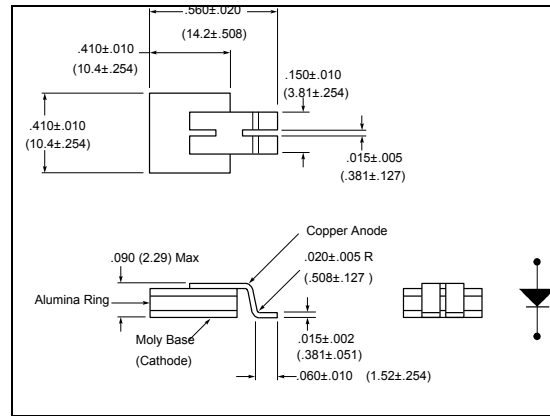
CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ( $I_f = 30$ Amps) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$V_f$	0.84 0.68	Volts
MAXIMUM REVERSE CURRENT ( $I_r$ @ 100 V PIV) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$I_r$	0.75 15	mA

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**MECHANICAL DIMENSIONS: In Inches / mm**

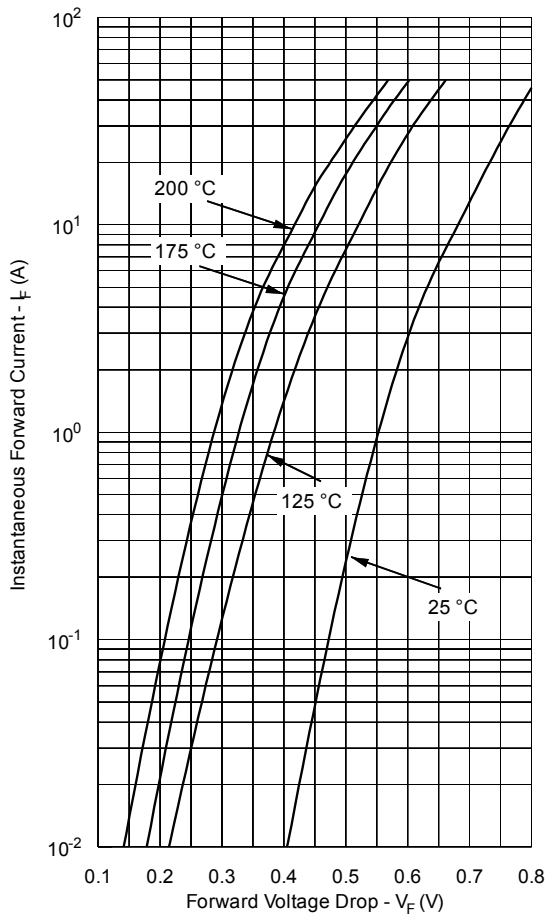


**SHD-3**

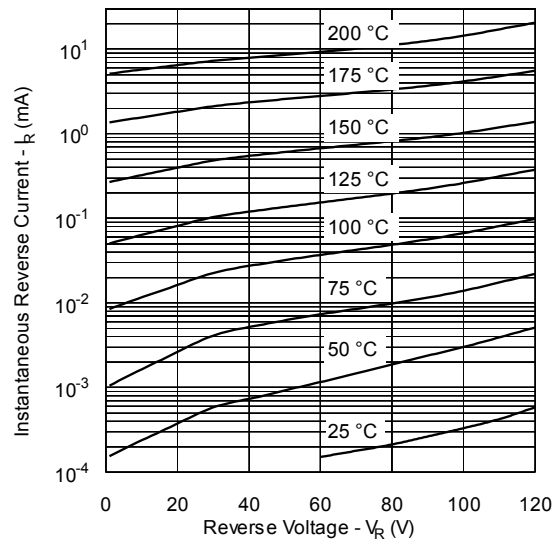


**SHD-3B**

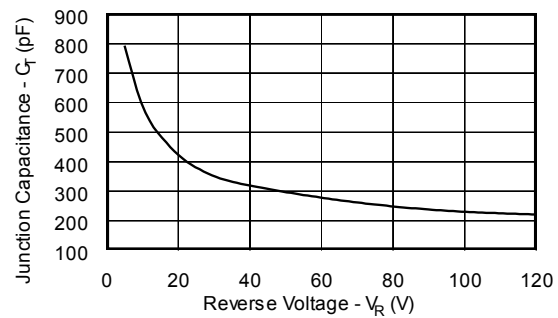
**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**



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