

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

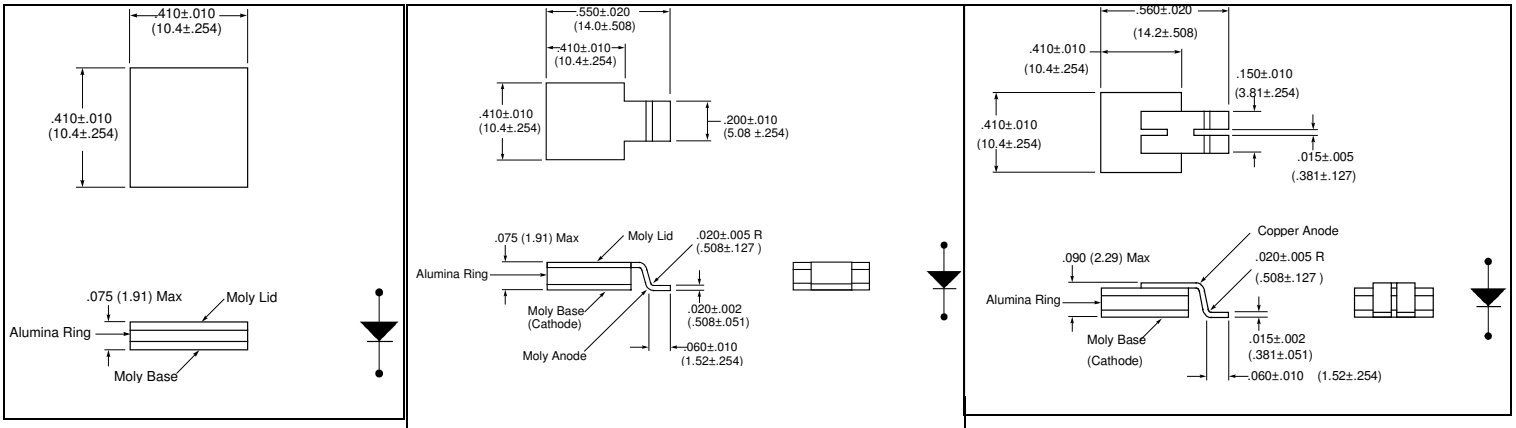
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	100	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100\text{ }^\circ\text{C}$ )	$I_O$	30	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ( $t=10\text{ms}$ , Sine)	$I_{FSM}$	570	Amps
MAXIMUM JUNCTION CAPACITANCE ( $V_r=5\text{V}$ )	$C_T$	1000	pF
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R\theta_{JC}$	0.50	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 200	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS

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

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

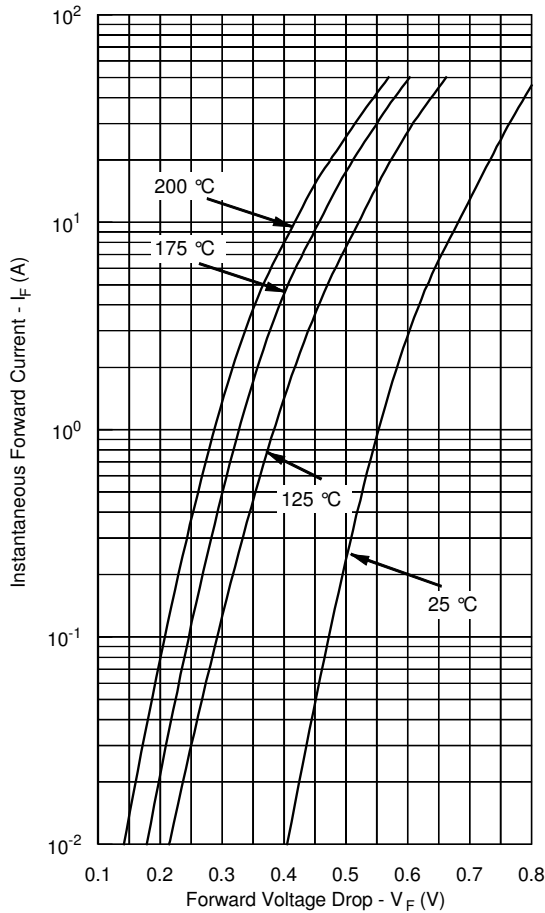


**SHD-3**

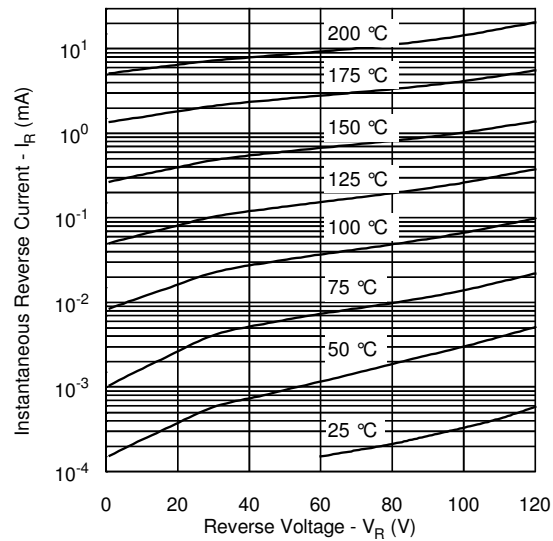
**SHD-3A**

**SHD-3B**

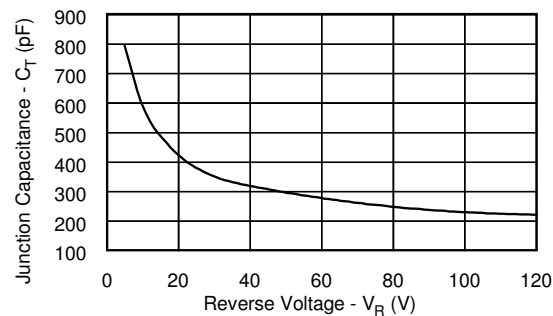
**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**



**TECHNICAL DATA**

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