

TECHNICAL DATA  
DATA SHEET 902, REV. -

## HERMETIC POWER SCHOTTKY RECTIFIER Low Forward Voltage Drop

**DESCRIPTION:** A 45 VOLT, 120 AMP, POWER SCHOTTKY RECTIFIER IN A SHD-3/3-A/3-B PACKAGE.

### MAXIMUM RATINGS

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

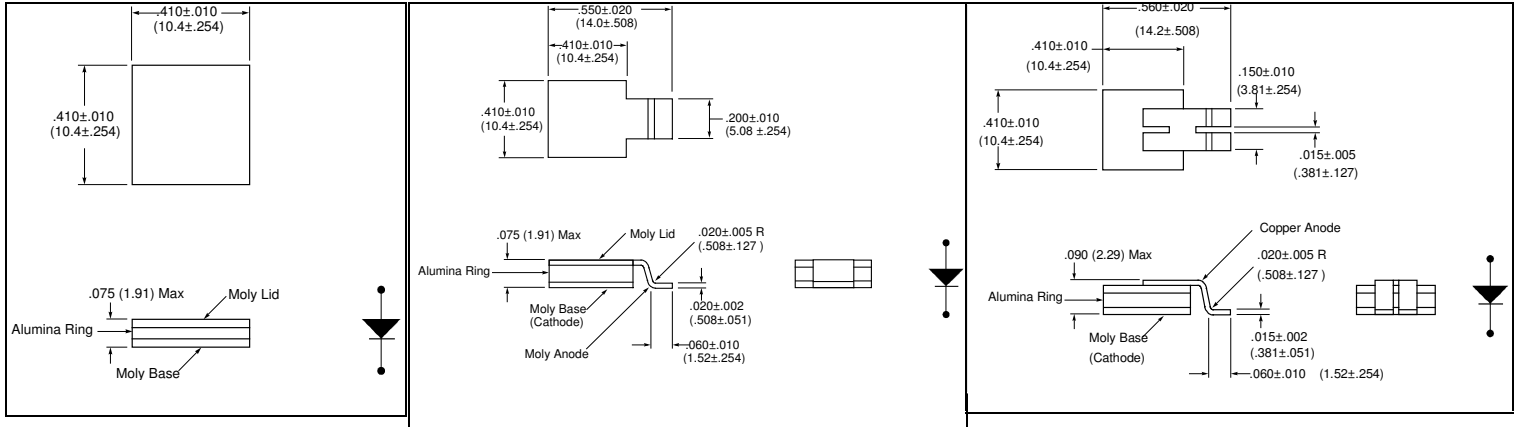
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	45	Volts
MAXIMUM DC OUTPUT CURRENT @ $T_C=100^\circ\text{C}$	$I_o$	120	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ( $t = 8.3\text{ms}$ , Sine)	$I_{FSM}$	1650	Amps
MAXIMUM JUNCTION CAPACITANCE ( $V_r=5\text{V}$ )	$C_T$	4800	pF
MAXIMUM THERMAL RESISTANCE (Junction to cathode)	$R_{\theta JC}$	0.2	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 150	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ( $I_f = 120\text{ Amps}$ ) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$V_f$	0.60 0.57	Volts
MAXIMUM REVERSE CURRENT ( $I_r @ 45\text{ V PIV}$ ) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$I_r$	9.0 420	mA

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**MECHANICAL DIMENSIONS: In Inches / mm**

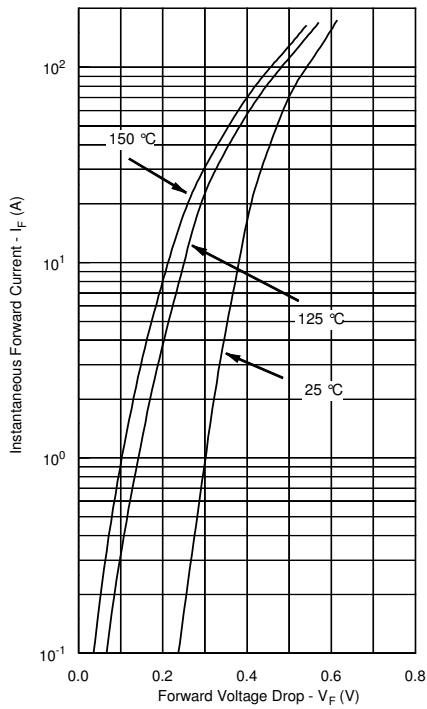


**SHD-3**

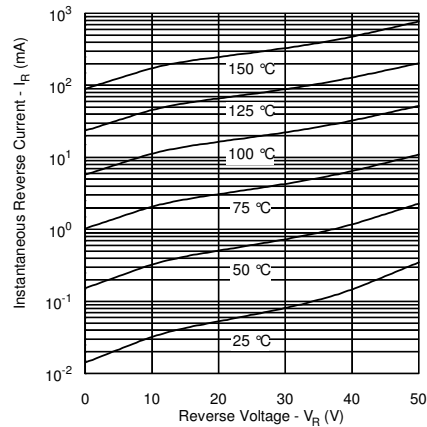
**SHD-3A**

**SHD-3B**

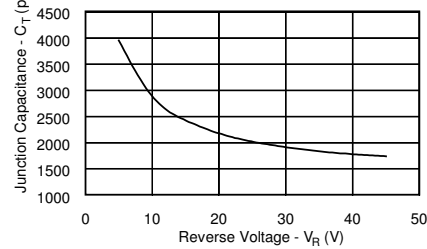
**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**



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