

TECHNICAL DATA  
DATA SHEET 4612, REV.A

**HERMETIC POWER SCHOTTKY RECTIFIER**  
(SINGLE / DUAL)

**DESCRIPTION:** A 100 VOLT, 7.5 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC SMD-1 PACKAGE.

**MAXIMUM RATINGS**

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

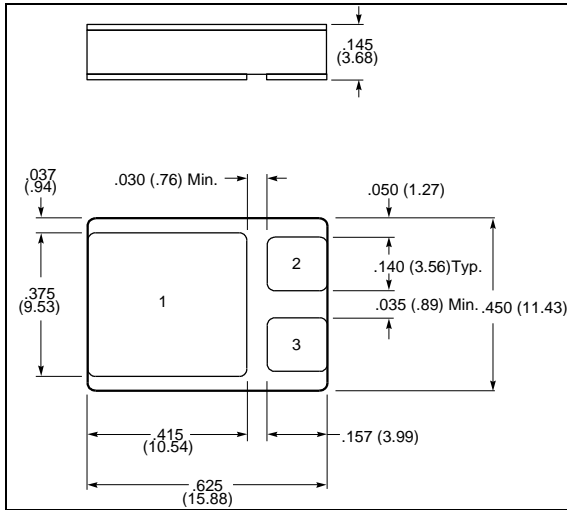
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	100	Volts
MAXIMUM DC OUTPUT CURRENT With Cathode Maintained (@ $T_C=100^\circ\text{C}$ ) (Single)	$I_o$	7.5	Amps
MAXIMUM DC OUTPUT CURRENT With Cathode Maintained (@ $T_C=100^\circ\text{C}$ ) (Common Cathode)	$I_o$	15	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ( $t = 8.3\text{ms}$ , Sine)	$I_{FSM}$	140	Amps
MAXIMUM JUNCTION CAPACITANCE ( $V_r=5\text{V}$ )	$C_T$	250	pF
MAXIMUM THERMAL RESISTANCE	$R_{\theta JC}$	1.21	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	$T_{op}/T_{stg}$	-65 to +200	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS**

CHARACTERISTIC			
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ( $I_f = 7.5$ Amps) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$V_f$	0.92 0.76	Volts
MAXIMUM REVERSE CURRENT ( $I_r @ 100$ V PIV) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$I_r$	0.18 4	mA

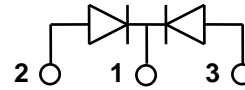
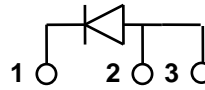
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**MECHANICAL DIMENSIONS: IN Inches / mm**



**SINGLE**

**COMMON CATHODE**

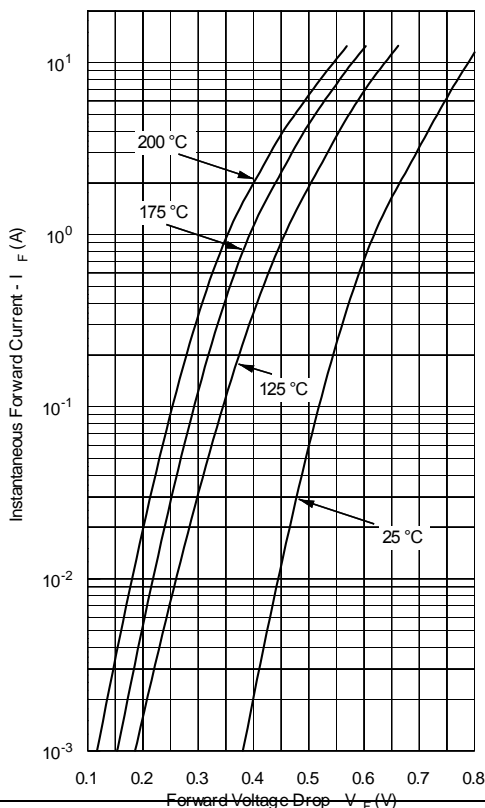


**SMD-1**

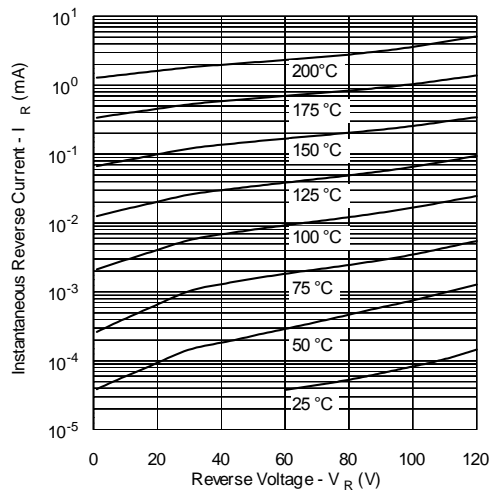
**PINOUT TABLE**

DEVICE TYPE	PIN 1	PIN 2	PIN 3
SINGLE RECTIFIER - SHD119144	CATHODE	ANODE	ANODE
COMMON CATHODE - SHD119144P	COMMON CATHODE	ANODE 1	ANODE 2

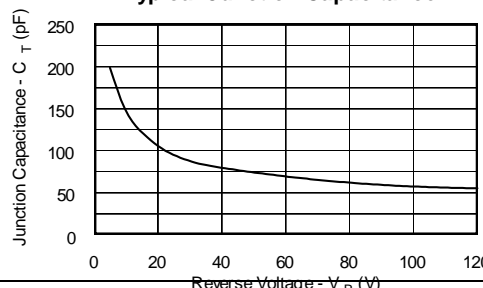
**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**



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