

TECHNICAL DATA DATA SHEET 252, REV. B

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# HERMETIC POWER SCHOTTKY RECTIFIER 200°C Maximum Operation Temperature

**DESCRIPTION:** 100 VOLT, 16 AMP, DUAL HERMETIC POWER SCHOTTKY RECTIFIER IN A SHD-4/4A PACKAGE.

# **MAXIMUM RATINGS**

ALL RATINGS ARE @  $T_C = 25$  °C UNLESS OTHERWISE SPECIFIED.

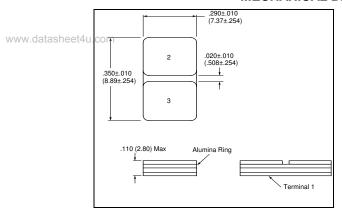
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RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	100	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ T <sub>C</sub> =100 <sup>O</sup> C)	Io	32	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (t=10ms, Sine)		240	Amps
MAXIMUM JUNCTION CAPACITANCE (V <sub>r</sub> =5V)	Ст	600	pF
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)		0.85	°C/W
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 200	°C

### **ELECTRICAL CHARACTERISTICS**

CHARACTERISTIC			
MAXIMUM FORWARD VOLTAGE DROP, Pulsed (per leg, I <sub>f</sub> = 16 Amps)			
T <sub>J</sub> = 25 °C	$V_{\rm f}$	0.85	Volts
T <sub>J</sub> = 125 °C	- '	0.69	
MAXIMUM REVERSE CURRENT (per leg, I <sub>r</sub> @ 100V PIV)			
T <sub>J</sub> = 25 °C	l <sub>r</sub>	0.1	mA
T <sub>J</sub> = 125 °C		2.0	

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



(11.2±.508)
(290±.010
(7.37±.254)

2
(11.2±.508)

.065±.010
(1.65±.254)

.020±.010
(.508±.254)

.110 (2.79) Max

Moly Lid
(4.70±.254)

Alumina Ring

Moly Base
Terminal 1

.060±.010
(1.52±.254)

SHD-4

1 2 3

SHD-4A

**PINOUT TABLE** 

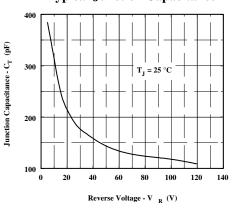
DEVICE TYPE	PIN 1	PIN 2	PIN 3
DUAL RECTIFIER COMMON CATHODE (P)	COMMON CATHODE	ANODE	ANODE
SHD-4, SHD-4A			

**Typical Reverse Characteristics** 

### **Typical Forward Characteristics**

# T<sub>1</sub> = 200 °C T<sub>2</sub> = 200 °C T<sub>3</sub> = 200 °C T<sub>3</sub> = 175 °C T<sub>4</sub> = 175 °C T<sub>5</sub> = 10 °C T<sub>7</sub> = 175 °C T<sub>7</sub> = 125 °C T<sub>8</sub> = 10 °C T<sub>1</sub> = 25 °C T<sub>1</sub> = 25 °C T<sub>2</sub> = 25 °C T<sub>3</sub> = 200 °C T<sub>4</sub> = 10 °C T<sub>5</sub> °C T<sub>5</sub> °C T<sub>7</sub> = 25 °C T<sub>8</sub> °C T<sub>9</sub> = 25 °C T<sub>1</sub> = 25 °C Reverse Voltage - V<sub>R</sub> (V)

## **Typical Junction Capacitance**





### **TECHNICAL DATA**

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