

TECHNICAL DATA DATA SHEET 4172, REV.-

# VERY LOW DROP HERMETIC POWER SCHOTTKY RECTIFIER (SINGLE / DUAL)

DESCRIPTION: A 30 VOLT, 45 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC TO-258 PACKAGE.

## **MAXIMUM RATINGS**

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

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	30	Volts
MAXIMUM DC OUTPUT CURRENT With Cathode Maintained (@ $T_c$ =70 $^{\circ}$ C) (Single / Doubler)	lo	45	Amps
MAXIMUM DC OUTPUT CURRENT With Cathode Maintained (@ $T_c$ =70 $^{\circ}$ C) (Common Cathode / Common Anode)	lo	60	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT PER LEG (t = 8.3ms, Sine)	I <sub>FSM</sub>	200	Amps
MAXIMUM JUNCTION CAPACITANCE PER LEG (V <sub>r</sub> =5V)	Ст	3300	pF
MAXIMUM THERMAL RESISTANCE PER PACKAGE	R <sub>eJC</sub>	0.47	°C/W
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 150	ů

## **ELECTRICAL CHARACTERISTICS**

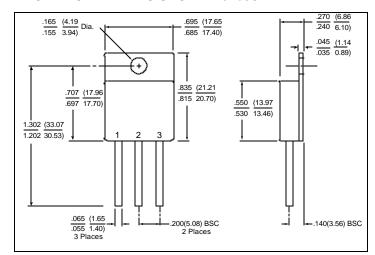
CHARACTERISTIC			
MAXIMUM FORWARD VOLTAGE DROP, Pulsed (I <sub>f</sub> = 45 Amps) PER LEG			
T <sub>J</sub> = 25 °C	$V_{f}$	0.74	Volts
T <sub>J</sub> = 100 °C		0.63	
MAXIMUM REVERSE CURRENT (Ir @ 30 V PIV)			
T <sub>J</sub> = 25 °C	I <sub>r</sub>	6	mA
T <sub>J</sub> = 125 °C		300	

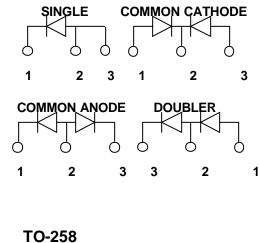
# **SEMICONDUCTOR**

SHD124511 SHD124511P SHD124511N SHD124511D

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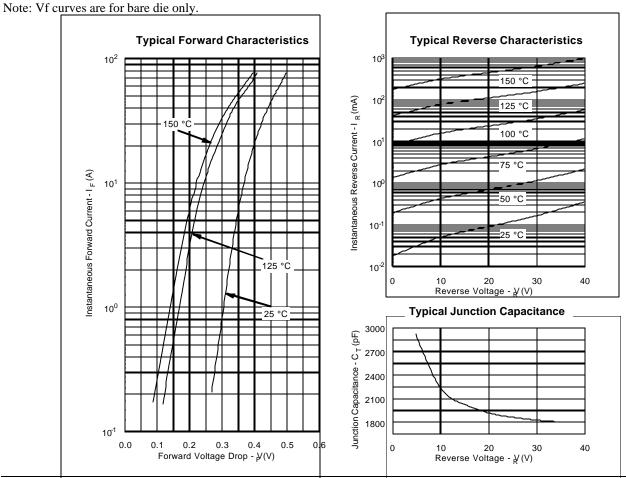
#### **MECHANICAL DIMENSIONS: In Inches / mm**





## **PINOUT TABLE**

TYPE	PIN 1	PIN 2	PIN 3
SINGLE RECTIFIER	CATHODE	ANODE	ANODE
DUAL RECTIFIER, COMMON CATHODE (P)	ANODE 1	COMMON CATHODE	ANODE 2
DUAL RECTIFIER, COMMON ANODE (N)	CATHODE 1	COMMON ANODE	CATHODE 2
DOUBLER (D)	ANODE	ANODE/CATHODE	CATHODE



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