

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

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	30	Volts
MAXIMUM DC OUTPUT CURRENT With Cathode Maintained (@ $T_C=70\text{ }^\circ\text{C}$ ) (Single / Doubler)	$I_o$	45	Amps
MAXIMUM DC OUTPUT CURRENT With Cathode Maintained (@ $T_C=70\text{ }^\circ\text{C}$ ) (Common Cathode / Common Anode)	$I_o$	60	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT PER LEG ( $t = 8.3\text{ms}$ , Sine)	$I_{FSM}$	200	Amps
MAXIMUM JUNCTION CAPACITANCE PER LEG ( $V_r = 5\text{V}$ )	$C_T$	3300	pF
MAXIMUM THERMAL RESISTANCE PER PACKAGE	$R_{\theta JC}$	0.47	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 150	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS**

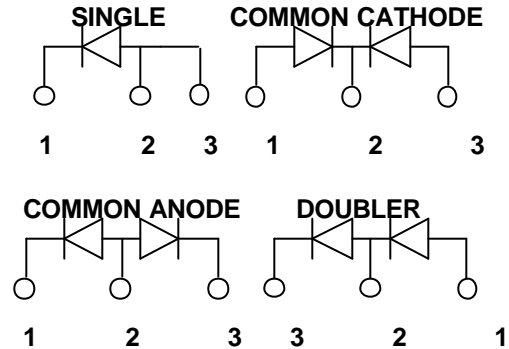
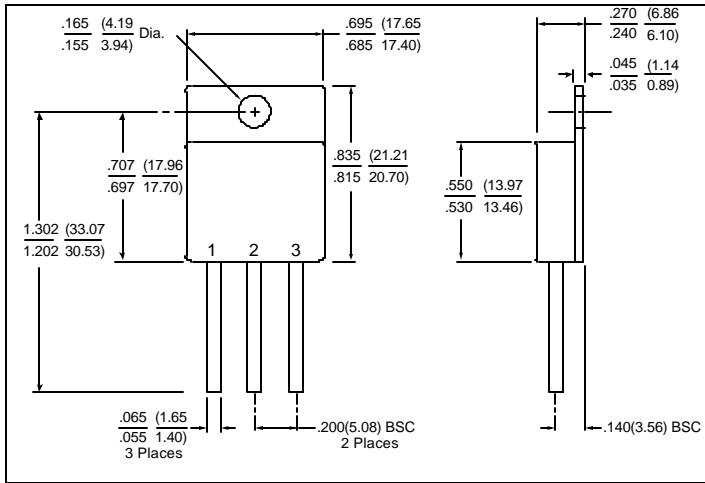
CHARACTERISTIC			
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ( $I_f = 45\text{ Amps}$ ) PER LEG $T_J = 25\text{ }^\circ\text{C}$ $T_J = 100\text{ }^\circ\text{C}$	$V_f$	0.74 0.63	Volts
MAXIMUM REVERSE CURRENT ( $I_r$ @ 30 V PIV) $T_J = 25\text{ }^\circ\text{C}$ $T_J = 125\text{ }^\circ\text{C}$	$I_r$	6 300	mA

# SENSITRON SEMICONDUCTOR

SHD124511  
SHD124511P  
SHD124511N  
SHD124511D

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### MECHANICAL DIMENSIONS: In Inches / mm

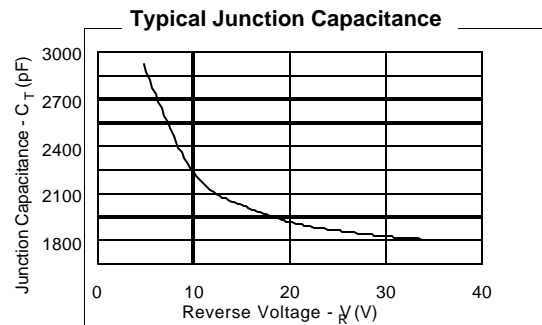
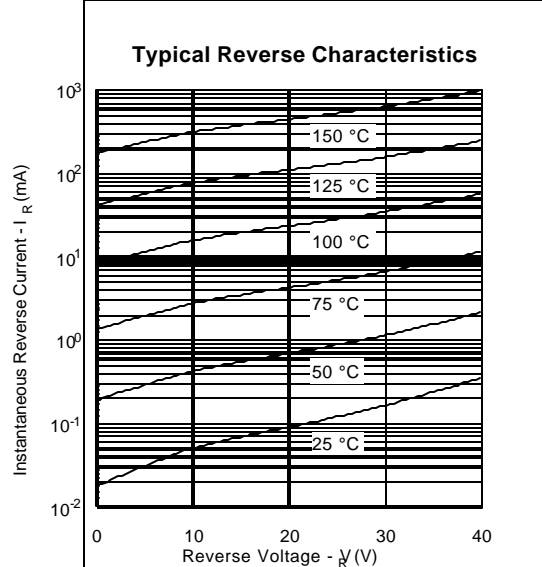
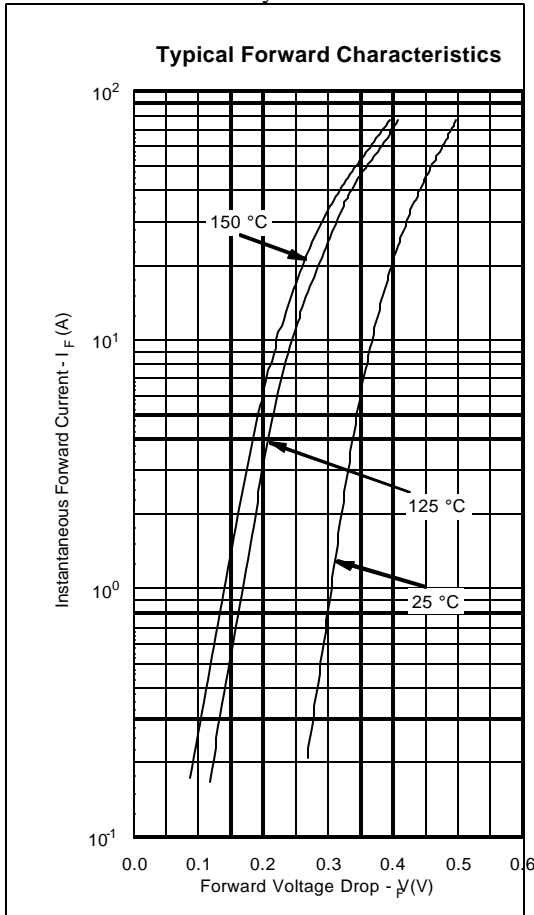


### TO-258

### 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

Note: Vf curves are for bare die only.



**TECHNICAL DATA**

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