

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

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	30	Volts
MAXIMUM DC OUTPUT CURRENT With Cathode Maintained (@ $T_c=70^\circ\text{C}$) (Single / Doubler)	I_o	45	Amps
MAXIMUM DC OUTPUT CURRENT With Cathode Maintained (@ $T_c=70^\circ\text{C}$) (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

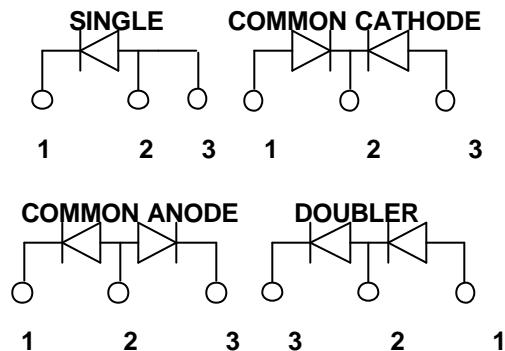
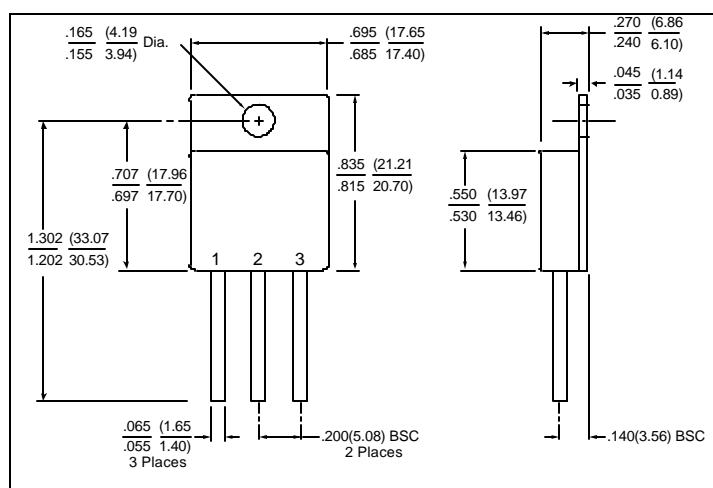
CHARACTERISTIC				
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ($I_f = 45$ Amps) PER LEG				
	$T_J = 25^\circ\text{C}$	V_f	0.74	Volts
	$T_J = 100^\circ\text{C}$		0.63	
MAXIMUM REVERSE CURRENT (I_r @ 30 V PIV)				
	$T_J = 25^\circ\text{C}$	I_r	6	mA
	$T_J = 125^\circ\text{C}$		300	

SENSITRON
SEMICONDUCTOR

SHD124511
SHD124511P
SHD124511N
SHD124511D

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MECHANICAL DIMENSIONS: In Inches / mm

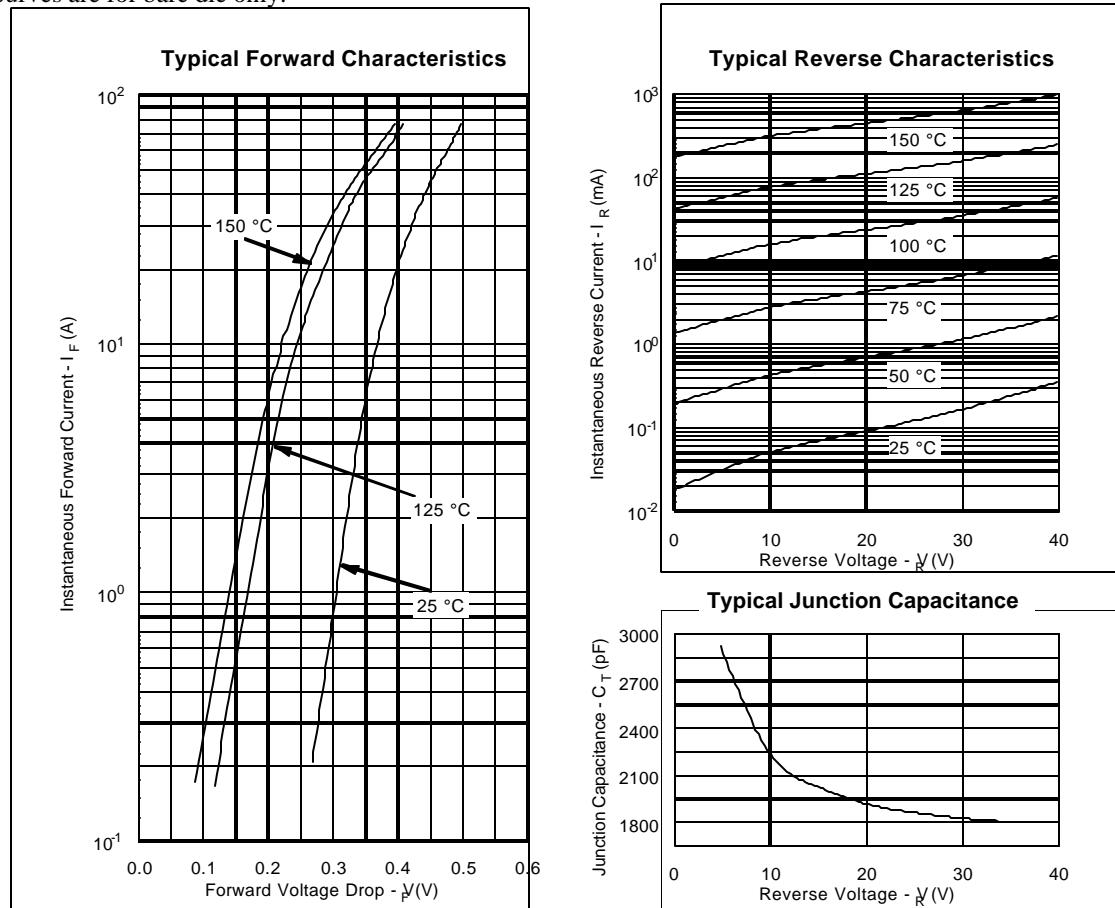


TO-258

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.



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