## SENSITRON SEMICONDUCTOR

TECHNICAL DATA DATA SHEET 294, REV. A

# HERMETIC POWER SCHOTTKY RECTIFIER Ultra Low Reverse Leakage

**DESCRIPTION:** 100 VOLT, 30 AMP, SINGLE / DUAL COMMON CATHODE, COMMON ANODE, DOUBLER, POWER SCHOTTKY RECTIFIER IN A TO-254 PACKAGE.

# MAX RATINGS / ELECTRICAL CHARACTRISTIC SPECIFIED.

ALL RATINGS ARE AT  $T_{\!C}$  = 25  $\,^{\circ}\text{C}$  UNLESS OTHERWISE

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	100	Volts
MAXIMUM DC OUTPUT CURRENT ( $T_c = 100 \ ^{\circ}C$ ) (COMMOM CATHODE, COMMON ANODE) (SINGLE, DOUBLER)	lo	30 15	Amps
MAXIMUM NONREPETITIVE FORWORD SURGE CURRENT (t=10ms, Sine) (Per leg)	I <sub>FSM</sub>	180	Amps
JUNCTION CAPACITANCE $V_R = 5Vdc, f = 1MHz$ $V_{SIG} = 50mV (p-p) (Max)$	C <sub>T</sub>	500	pF
MAXIMUM THERMAL RESISTANCE (SINGLE) (COMMOM CTAHODE, COMMON ANODE, DOUBLER)	R <sub>θJC</sub>	1.45 0.72	°C/W
MAXIMUM OPERATING TEMPERATURE RANGE	T <sub>op/stg</sub>	-65 to +175	°C
MAXIMUM JUNCTION TEMPERATURE	T <sub>J(MAX)</sub>	+200	°C

## **ELECTRICAL CHARACTERISTICS**

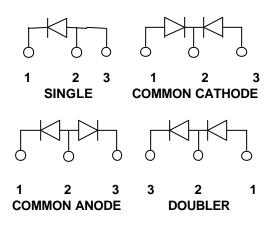
CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP (per leg, $I_F = 15A$ )			
$T_J = 25 \ ^{\circ}C$	$V_{f}$	0.95	Volts
T <sub>J</sub> = 125 °C		0.77	
MAXIMUM REVERSE CURRENT I, @ PIV (per leg, I, @ 100V PIV))		0.1 1.0	mA
$T_{\rm J} = 25 \ ^{\circ}{\rm C}$	l,		
T <sub>J</sub> = 125 °C		1.0	

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SHD125234 SHD125234P SHD125234N SHD125234D

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### **MECHANICAL DIMENSIONS: In Inches / mm** .260 (6.60 .249 (6.32) .149 (3.78 .139 (3.53) Dia .545 (13.84 .535 13.60) $\begin{array}{c} .050 \\ .040 \\ \hline 1.02 \end{array} \qquad \begin{array}{c} (1.27) \\ 1.02 \end{array}$ (+) .800 (20.32 .790 20.07) .685 (17.40 .665 16.89) .545 (13.84 .535 13.58) 1.235 (31.37 1.195 30.35) 2 3 .045 (1.14 .035 (0.89) 3 Places +.150(3.81) BSC -.150(3.81) BSC 2 Places -

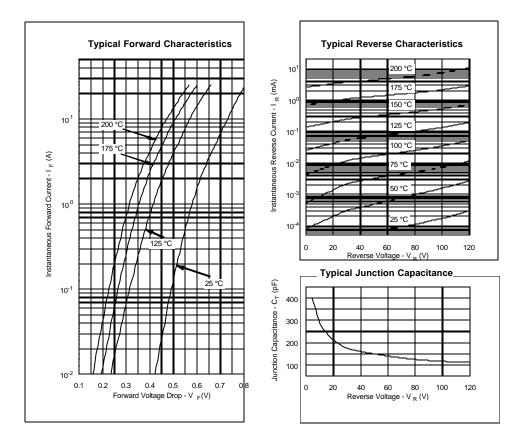


## <u>TO-254</u>

## PINOUT TABLE

ТҮРЕ	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	CATHODE/ANODE	CATHODE

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