# <u>SENSITRON</u> SEMICONDUCTOR

SHD125244 SHD125244P SHD125244N SHD125244D

TECHNICAL DATA DATA SHEET 254, REV. F

## HERMETIC POWER SCHOTTKY RECTIFIER

SINGLE / DUAL COMMON CATHODE, COMMON ANODE, DOUBLER

**DESCRIPTION:** A 100 VOLT, 30 AMP POWER SCHOTTKY RECTIFIER IN A HERMETIC TO-254 PACKAGE.

MAXIMUM RATINGS ALL RATIN	ALL RATINGS ARE AT T $_{\rm C}$ = 25 °C UNLESS OTHERWISE SPECIFIED.			
RATING		SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE		PIV	100	Volts
MAXIMUM DC OUTPUT CURRENT (T <sub>c</sub> = 100 °C) (SINGLE / DOUBLER)		Ι <sub>ο</sub>	15	Amps
MAXIMUM DC OUTPUT CURRENT ( $T_c = 100 \text{ °C}$ ) (COMMON CATHODE / COMMON ANODE)		Ι <sub>ο</sub>	30	Amps
MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT Sine) (per leg)	(t=8.3ms,	I <sub>FSM</sub>	150	Amps
JUNCTION CAPACITANCE $V_R = 5Vdc$ (per leg)		Cτ	600	pF
MAXIMUM THERMAL RESISTANCE (per leg)		$R_{ ext{ heta}JC}$	2.82	°C/W
MAXIMUM OPERATING TEMPERATURE RANGE		T <sub>op/stg</sub>	-55 to +175	°C

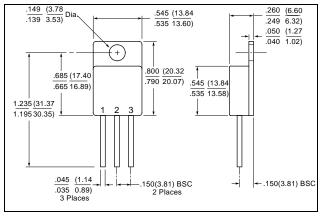
## ELECTRICAL CHARACTERISTICS

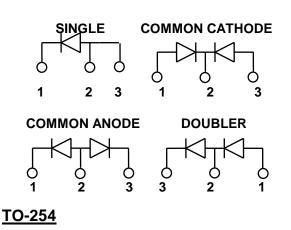
CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP $(I_F = 15A)$ (per leg)			
T <sub>J</sub> = 25 °C	V <sub>f</sub>	0.93	Volts
T <sub>J</sub> = 125 °C		0.83	
MAXIMUM REVERSE CURRENT (I, @ PIV) (per leg)			
T <sub>J</sub> = 25 °C	I <sub>r</sub>	0.35 8.0	mA
T <sub>J</sub> = 125 °C		0.0	

### **SENSITRON**

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

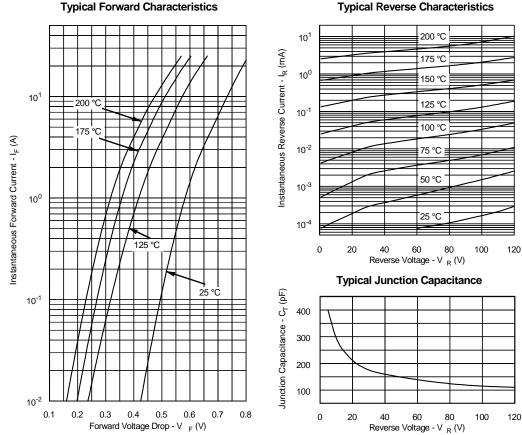




#### **PINOUT TABLE**

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	ANODE/CATHODE	CATHODE

V<sub>F</sub> curves shown are for die only.



#### **Typical Reverse Characteristics**

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