

TECHNICAL DATA DATA SHEET 390, REV. B

# ULTRA LOW REVERSE LEAKAGE POWER SCHOTTKY RECTIFIER Very Low Voltage Drop

**DESCRIPTION:** 200 VOLT, 45 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC TO-258 PACKAGE.

## **MAXIMUM RATINGS**

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

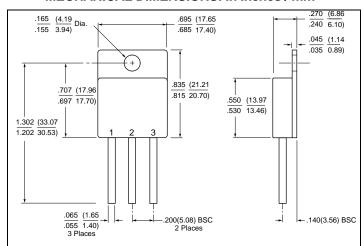
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	200	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ T <sub>C</sub> =100 °C)	Io	45	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT	I <sub>FSM</sub>	200	Amps
(t = 8.3ms, Sine) (per leg)			
MAXIMUM JUNCTION CAPACITANCE (V <sub>r</sub> =5V) (per leg)	C <sub>T</sub>	900	pF
MAXIMUM THERMAL RESISTANCE (per leg)	$R\theta_{JC}$	0.50	°C/W
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Тор	-65 to + 200	°C
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Tstg	-65 to + 175	°C

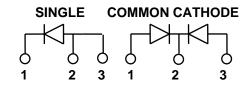
## **ELECTRICAL CHARACTERISTICS**

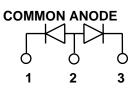
CHARACTERISTIC			
MAXIMUM FORWARD VOLTAGE DROP, Pulsed (I <sub>f</sub> = 45 Amps) (per leg)			
T <sub>J</sub> = 25 °C	$V_{f}$	1.18	Volts
T <sub>J</sub> = 125 °C	- 1	1.02	
MAXIMUM REVERSE CURRENT (I <sub>r</sub> @ 200V PIV) (per leg)			
T <sub>J</sub> = 25 °C	l <sub>r</sub>	0.3	mA
T <sub>J</sub> = 125 °C		3.0	
REVERSE RECOVERY TIME	t <sub>rr</sub>	32	ns

## DATA SHEET 390, REV. B

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





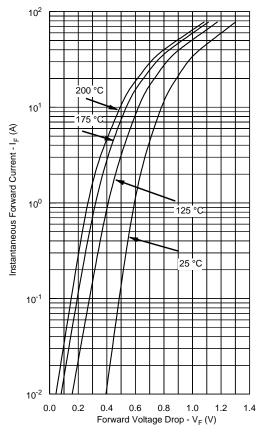


**TO-258** 

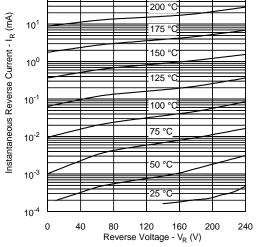
## **PINOUT TABLE**

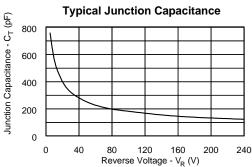
TYPE	PIN 1	PIN 2	PIN 3
SINGLE RECTIFIER	CATHODE	ANODE	ANODE
DUAL RECTIFIER, COMMON CATHODE (P)	ANODE 1	COMMON CATHODE	ANODE 2
DUAL RECTIFIER, COMMON ANODE (N)	CATHODE 1	COMMON ANODE	CATHODE 2

## **Typical Forward Characteristics**



## **Typical Reverse Characteristics**





## **SENSITRON**

## DATA SHEET 390, REV. B

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