TECHNICAL DATA DATA SHEET 4053, REV. A

# POWER SCHOTTKY RECTIFIER Very Low Voltage Drop

### FEATURES:

Available Screened to Mil-S-19500, TX, TXV and S Levels Add "C" for ceramic seals (example: SHDC124522)

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

MAXIMUM RATINGSALL RATINGS ARE @ $T_c = 25 \degree C UN$	ALL RATINGS ARE @ T_ = 25 °C UNLESS OTHERWISE SPECIFIED.				
RATING	SYMBOL	MAX.	UNITS		
PEAK INVERSE VOLTAGE	PIV	45	Volts		
MAXIMUM DC OUTPUT CURRENT @ T <sub>C</sub> =100 <sup>O</sup> C	I <sub>O</sub>	45	Amps		
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT	I <sub>FSM</sub>	200	Amps		
(t = 8.3ms, Sine) (per leg)					
MAXIMUM THERMAL RESISTANCE (per leg)	$R_{\theta JC}$	0.72	°C/W		
MAXIMUM JUNCTION TEMPERATURE RANGE	Тор	-65 to + 175	°C		
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Tstg	-65 to + 175	°C		

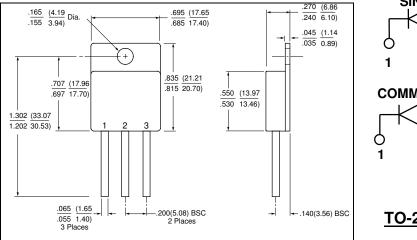
## **ELECTRICAL CHARACTERISTICS**

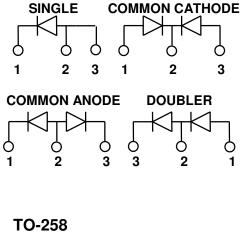
CHARACTERISTIC			
MAXIMUM FORWARD VOLTAGE DROP, Pulsed $(I_f = 45 \text{ Amps})$ (per leg)			
T <sub>J</sub> = 25 °C	V <sub>f</sub>	0.86	Volts
T <sub>J</sub> = 125 °C		0.77	
MAXIMUM REVERSE CURRENT (Ir @ 45V PIV) (per leg)			
T <sub>J</sub> = 25 °C	l <sub>r</sub>	1.2	mA
T <sub>J</sub> = 125 °C		45	
MAXIMUM JUNCTION CAPACITANCE ( $V_r = 5V$ ) (per leg)	C <sub>T</sub>	2400	pF

# SENSITRON

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



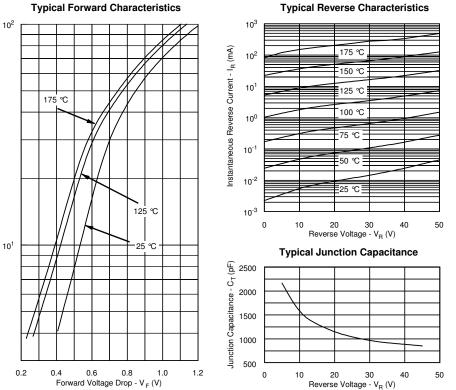


#### **PINOUT TABLE**

Instantaneous Forward Current - I<sub>F</sub> (A)

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 die only





#### **TECHNICAL DATA**

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