

TECHNICAL DATA  
DATA SHEET 4053, REV. B

## 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 RATINGS**

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

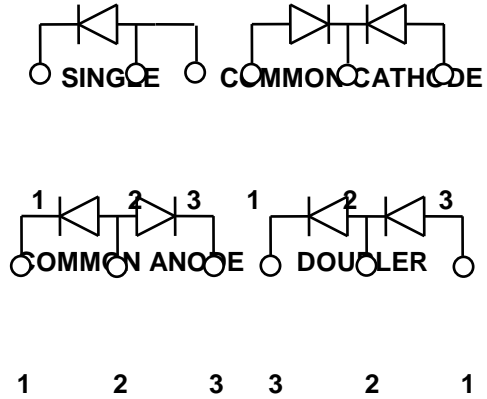
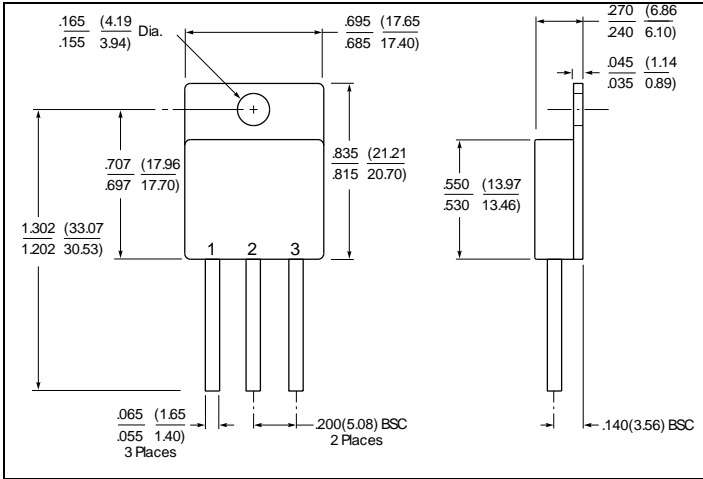
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	45	Volts
MAXIMUM DC OUTPUT CURRENT @ $T_c=100^\circ\text{C}$	$I_o$	45	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ( $t = 8.3\text{ms}$ , Sine) (per leg)	$I_{FSM}$	200	Amps
MAXIMUM THERMAL RESISTANCE (per leg)	$R_{\theta JC}$	1.15	$^\circ\text{C/W}$
MAXIMUM JUNCTION TEMPERATURE RANGE	Top	-65 to + 175	$^\circ\text{C}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Tstg	-65 to + 175	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS**

CHARACTERISTIC			
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ( $I_f = 45$ Amps) (per leg) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$V_f$	0.86 0.77	Volts
MAXIMUM REVERSE CURRENT ( $I_r$ @ 45V PIV) (per leg) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$I_r$	1.2 45	mA
MAXIMUM JUNCTION CAPACITANCE ( $V_r=5\text{V}$ ) (per leg)	$C_T$	2400	pF

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**MECHANICAL DIMENSIONS: In Inches / mm**



**TO-258**

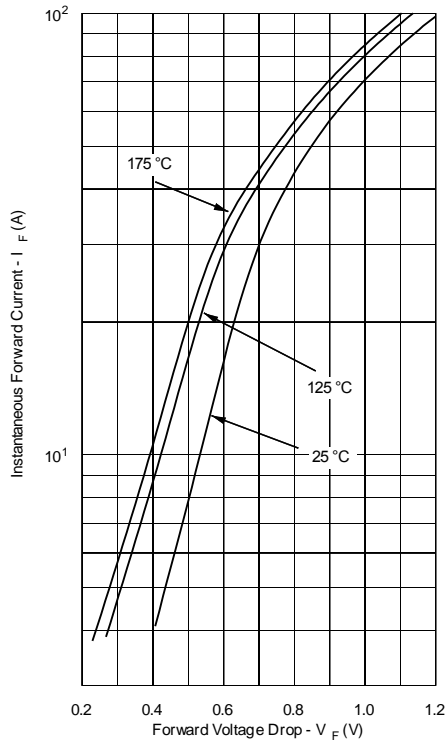
**PINOUT TABLE**

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

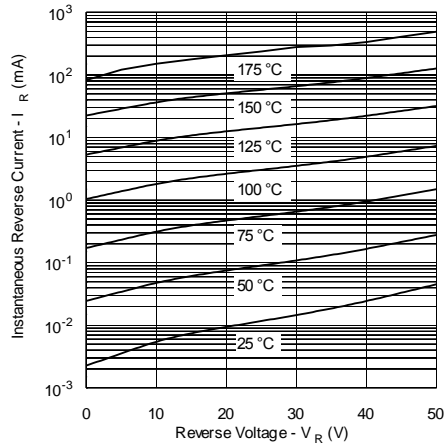
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Note: Vf curves are for die only

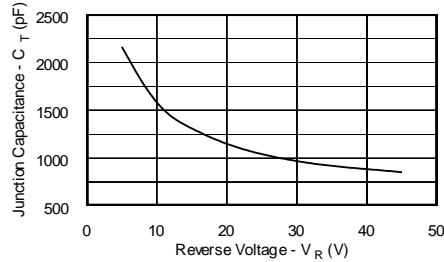
**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**



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