

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.

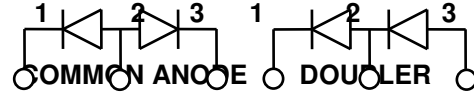
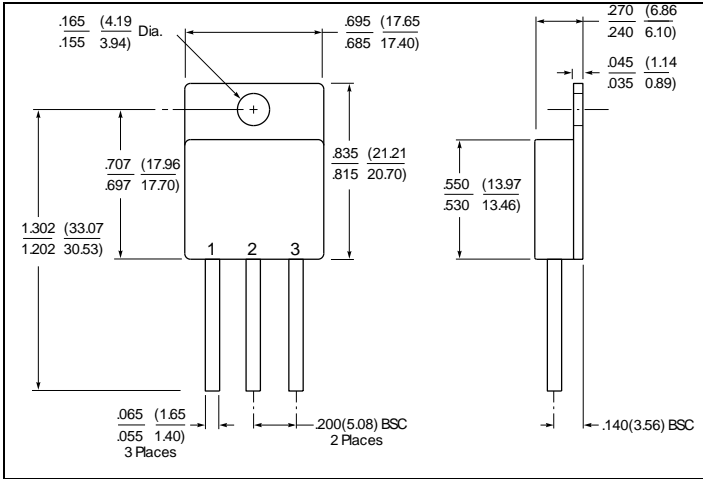
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	45	Volts
MAXIMUM DC OUTPUT CURRENT @ $T_C=100^\circ\text{C}$	I_o	45	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ($t = 8.3\text{ms}$, Sine) (per leg)	I_{FSM}	200	Amps
MAXIMUM THERMAL RESISTANCE (per leg)	$R_{\theta JC}$	1.15	$^\circ\text{C/W}$
MAXIMUM 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



1 2 3 3 2 1

TO-258

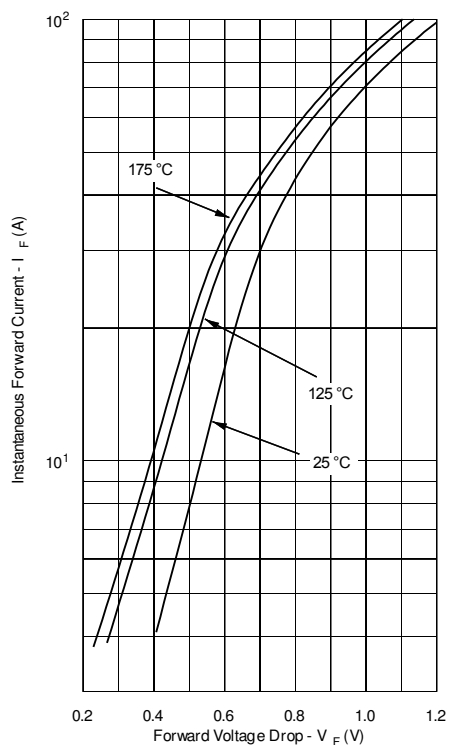
PINOUT TABLE

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

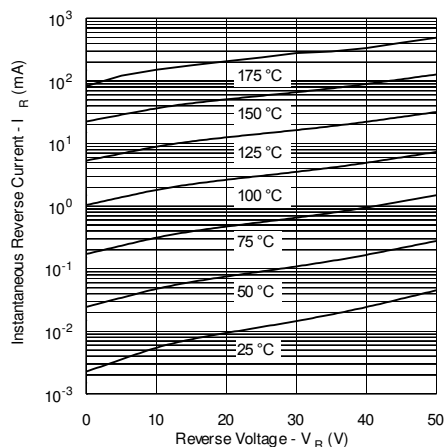
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Note: Vf curves are for die only

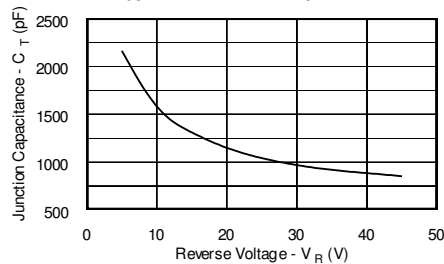
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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