

TECHNICAL DATA  
DATA SHEET 306, REV. B

## HERMETIC POWER SCHOTTKY RECTIFIER Very Low Forward Voltage Drop

**DESCRIPTION:** 45 VOLT, 30 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC TO-254 PACKAGE.

### MAXIMUM RATINGS

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

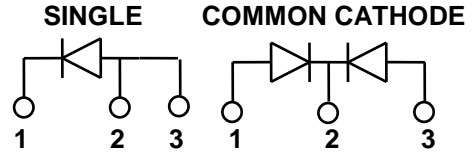
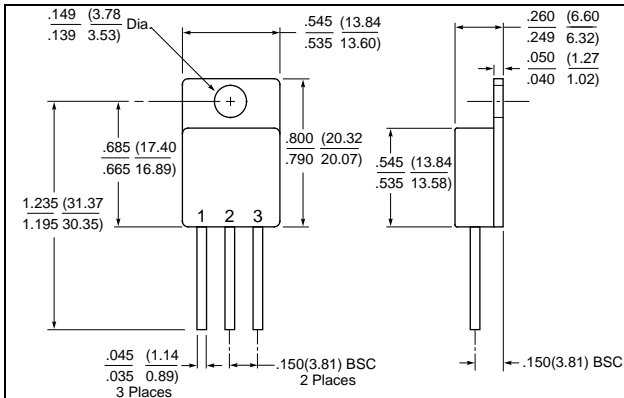
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	45	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100^\circ\text{C}$ )	$I_O$	30	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ( $t = 8.3\text{ms}$ , Sine)	$I_{FSM}$	150	Amps
MAXIMUM JUNCTION CAPACITANCE ( $V_r = 5\text{V}$ )	$C_T$	1600	pF
MAXIMUM THERMAL RESISTANCE	$R_{\theta_{JC}}$	1.5	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 175	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ( $I_f = 30$ Amps) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$V_f$	0.73 0.68	Volts
MAXIMUM REVERSE CURRENT ( $I_r$ @ 45V PIV) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$I_r$	3.0 140	mA

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**MECHANICAL DIMENSIONS: In Inches / mm**

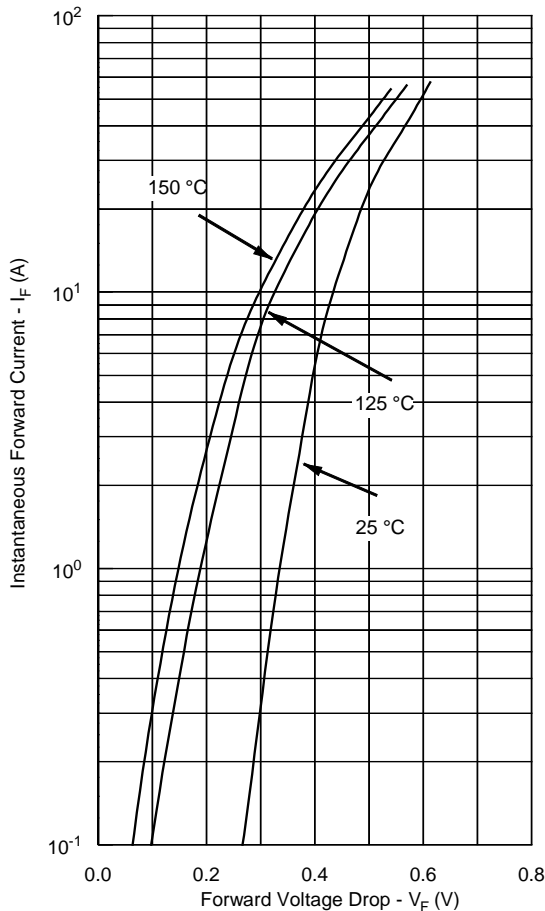


**TO-254**

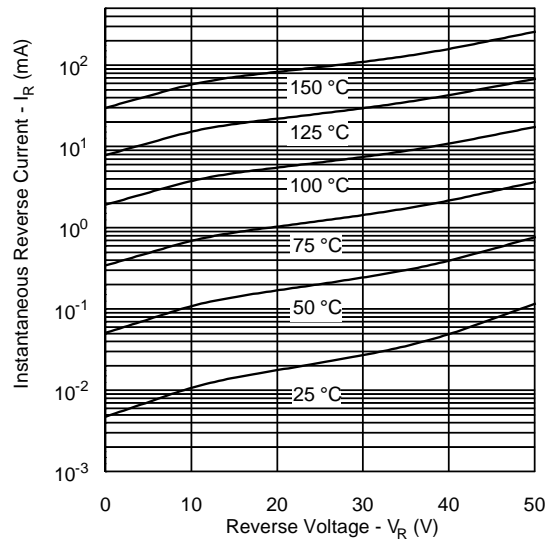
**PINOUT TABLE**

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

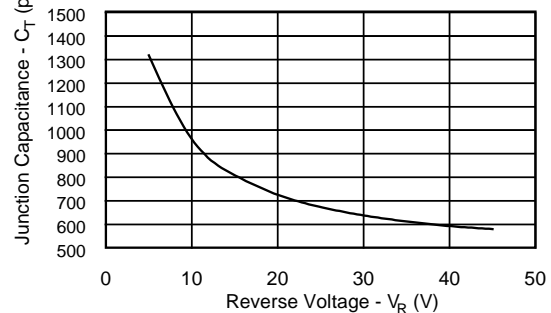
**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**



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