

TECHNICAL DATA
DATASHEET 4739, REV. A

HERMETIC POWER SCHOTTKY RECTIFIER
175°C Maximum Operation Temperature

DESCRIPTION: A 45-VOLT, 35 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC TO-254 PACKAGE.

MAXIMUM RATINGS

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

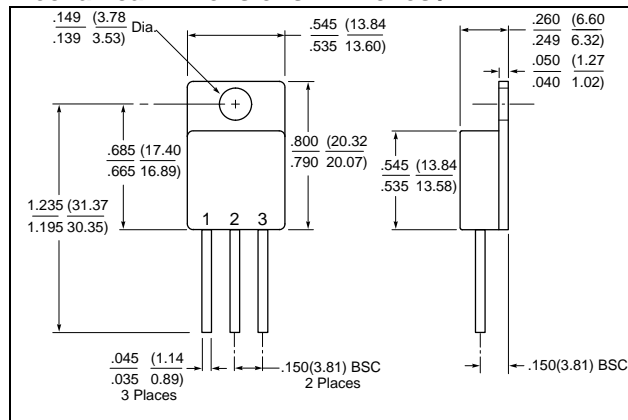
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	45	Volts
MAXIMUM DC OUTPUT CURRENT (@ $T_c=100^\circ\text{C}$) (Single, Doubler)	I_o	35	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ($t=8.3\text{ms}$, Sine)	I_{FSM}	150	Amps
MAXIMUM JUNCTION CAPACITANCE ($V_r=5\text{V}$)	C_T	4800	pF
MAXIMUM THERMAL RESISTANCE (Single)	$R_{\theta JC}$	0.33	$^\circ\text{C/W}$
MAXIMUM OPERATING TEMPERATURE RANGE	Top/Tstg	-65 to + 175	$^\circ\text{C}$
MAXIMUM STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 175	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

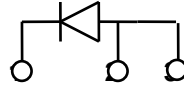
CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ($I_f = 35$ Amps) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	V_f	0.73 0.62	Volts
MAXIMUM REVERSE CURRENT (I_r @ 45 V PIV) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	I_r	2.4 90	mA

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Mechanical Dimensions: In inches / mm



SINGLE



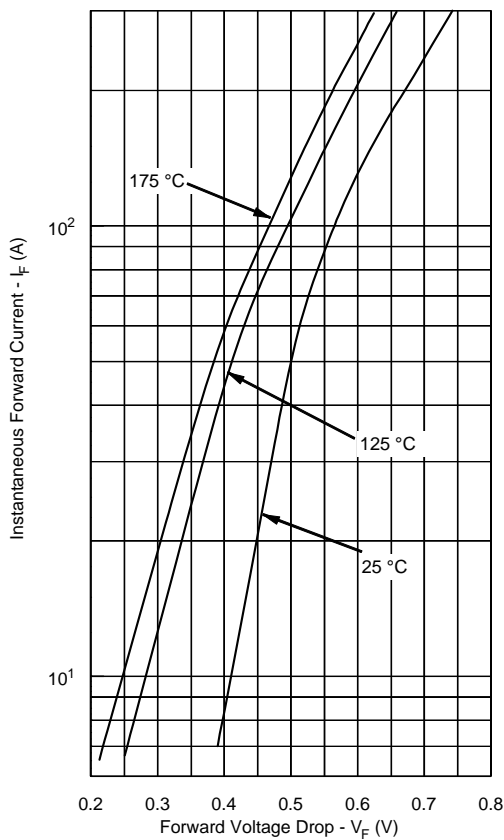
TO-254

PINOUT TABLE

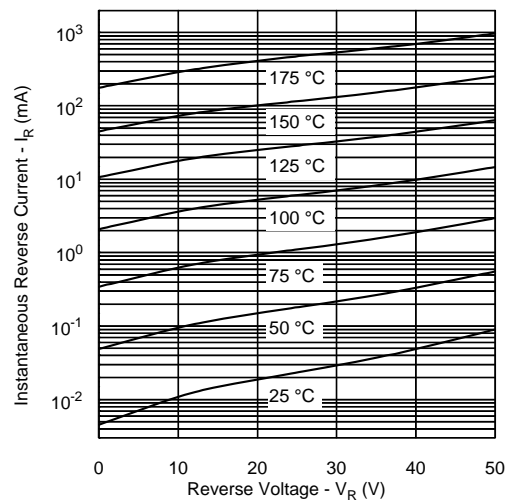
TYPE	PIN 1	PIN 2	PIN 3
SINGLE RECTIFIER	CATHODE	ANODE	ANODE

Curves shown are for bare die only.

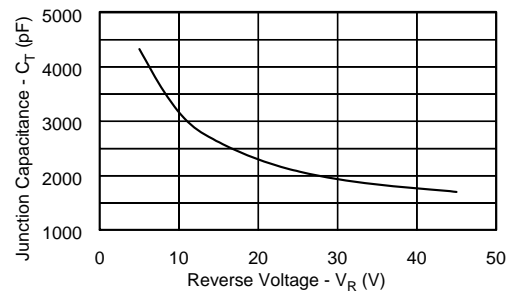
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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