

TECHNICAL DATA
DATA SHEET 821, REV. A

HERMETIC ULTRAFAST RECOVERY RECTIFIER

DESCRIPTION: A 300 VOLT, 20/40 AMP, 50 NANO SECOND, RECTIFIER IN A HERMETIC TO-254 PACKAGE.

MAXIMUM RATING

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

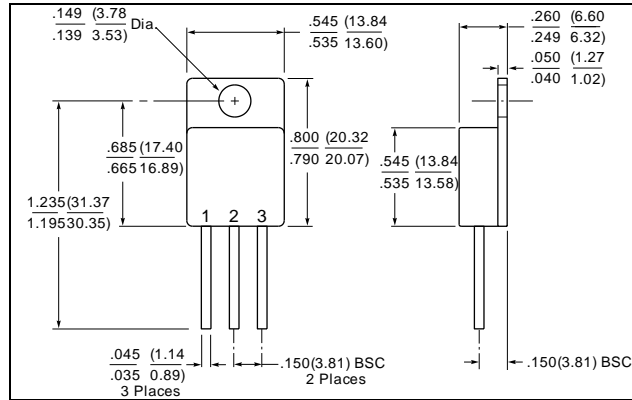
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE (PER LEG)	PIV	300	Volts
MAXIMUM DC OUTPUT CURRENT ($T_C = 100\text{ }^\circ\text{C}$)(PER LEG)	I_o	20	Amps
PEAK SINGLE CYCLE SURGE CURRENT $t_p = 8.3\text{ msec}$, (PER LEG)	I_{FSM}	120	Amps
MAXIMUM THERMAL RESISTANCE (PER LEG)	$R_{\theta JC}$	2.0	$^\circ\text{C/W}$
MAXIMUM THERMAL RESISTANCE (PER PACKAGE)		1.0	
MAXIMUM OPERATING TEMPERATURE RANGE	-	-65 to +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTIC

CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP (PER LEG) ($I_f = 20\text{ Amps}$) $I_f = 20\text{A}, T_A = 125\text{ }^\circ\text{C}$	V_f	1.30 1.20	Volts
MAXIMUM REVERSE CURRENT I_r @ PIV (PER LEG) , $T_J = 25\text{ }^\circ\text{C}$ $T_J = 125\text{ }^\circ\text{C}$	I_r	50 1.0	μA mA
MAXIMUM REVERSE RECOVERY TIME ($I_f = 0.5\text{A}$, $I_r = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$)	t_{rr}	35	nsec
JUNCTION CAPACITANCE $V_R = 10\text{Vdc}$, $f = 1\text{MHz}$; $V_{SIG} = 100\text{mV}$ (p-p) (Max)	C_J	200	pF

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TECHNICAL DATA
DATA SHEET 821, REV. A

MECHANICAL DIMENSIONS: In Inches / mm

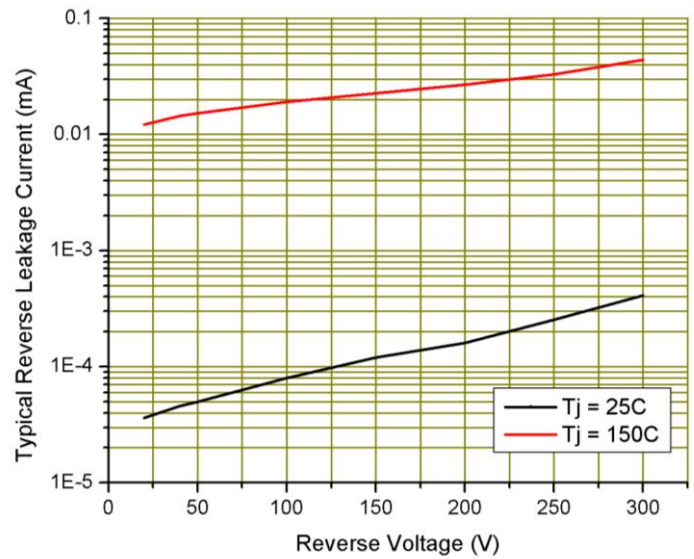
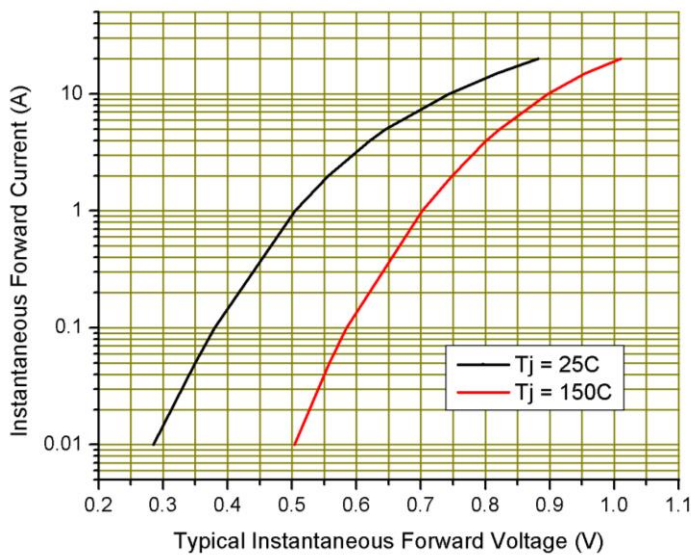


TO-254

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
DUAL RECTIFIER, COMMON ANODE (N)	CATHODE 1	COMMON ANODE	CATHODE 2
DUAL RECTIFIER, DOUBLER (D)	ANODE	CATHODE/ ANODE	CATHODE

Characteristics Curves



SENSITRON

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