

SENSITRON
SEMICONDUCTOR

TECHNICAL DATA
DATA SHEET 347, REV. A

HERMETIC ULTRAFAST RECOVERY RECTIFIER

DESCRIPTION: 400 VOLT, 15 AMP, 15 NANOSECOND, RECTIFIER IN A HERMETIC TO-254 PACKAGE.

MAX RATINGS/ELECTRICAL CHARACTERISTICS

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

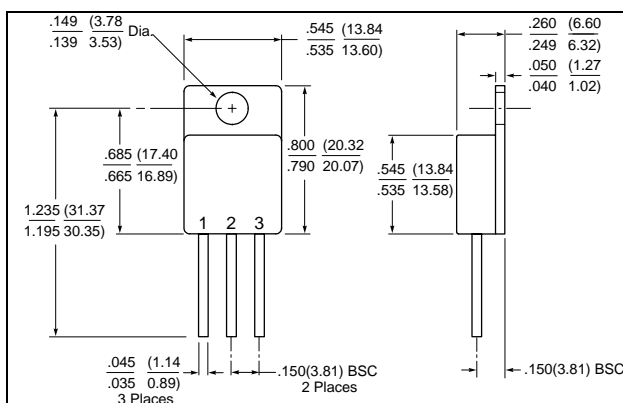
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE (PER LEG)	PIV	400	Volts
MAXIMUM FORWARD VOLTAGE DROP (PER LEG) $I_F = 10\text{A}, T_A = 25^\circ\text{C}$ $I_F = 20\text{A}, T_A = 25^\circ\text{C}$	V_f	1.35 1.55	Volts
MAXIMUM DC OUTPUT CURRENT ($T_C = 100^\circ\text{C}$) (PER LEG)	I_o	15	Amps
PEAK SINGLE CYCLE SURGE CURRENT $t_p = 8.3\text{ msec.}$	I_{FSM}	150	Amps
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
MAXIMUM REVERSE CURRENT I_r @ PIV ($T_C = 100^\circ\text{C}$) (PER LEG)	I_r	50 5.0	μA mA
MAXIMUM THERMAL RESISTANCE (PER LEG)	$R_{\theta JC}$	2.0	$^\circ\text{C/W}$
MAXIMUM OPERATING TEMPERATURE RANGE	T_{OP}	-65 to +200	$^\circ\text{C}$
JUNCTION CAPACITANCE $V_R = 10\text{Vdc}, f = 1\text{MHz}$ $V_{SIG} = 50\text{mV (p-p) (Max)}$	C_J	150	pF

* Suffix R denotes common anode version.



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MECHANICAL DIMENSIONS: In Inches / mm



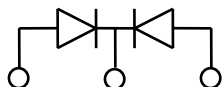
TO-254

PINOUT TABLE

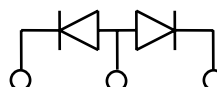
TYPE	PIN 1	PIN 2	PIN 3
DUAL RECTIFIER, COMMON CATHODE	ANODE 1	COMMON CATHODE	ANODE 2
DUAL RECTIFIER, COMMON ANODE (R)	CATHODE 1	COMMON ANODE	CATHODE 2

SCHEMATIC

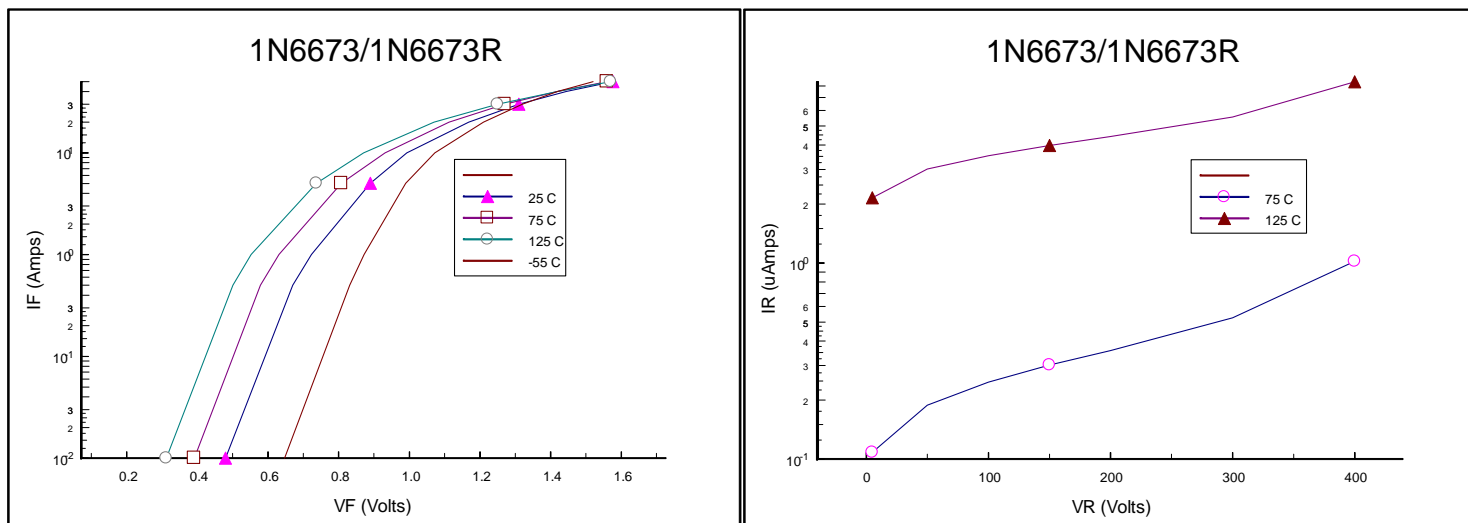
COMMON CATHODE



COMMON ANODE



CHARACTERISTICS CURVES



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