

**SENSITRON**  
**SEMICONDUCTOR**

TECHNICAL DATA  
DATA SHEET 348, REV. -

**HERMETIC ULTRAFAST RECOVERY RECTIFIER**

**DESCRIPTION:** 500 VOLT, 30 AMP, 15 NANOSECOND, RECTIFIER IN A HERMETIC TO-254 PACKAGE.

**MAX RATINGS/ELECTRICAL CHARACTERISTICS**

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

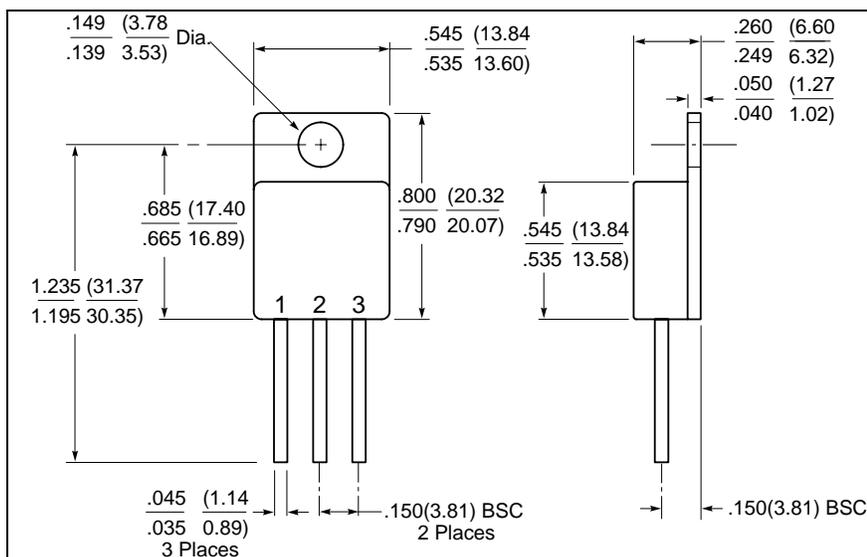
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE (PER LEG)	PIV	500	Volts
MAXIMUM FORWARD VOLTAGE DROP (PER LEG) $I_F = 10\text{A}, T_A = 25\text{ }^\circ\text{C}$ $I_F = 20\text{A}, T_A = 25\text{ }^\circ\text{C}$	$V_f$	1.35 1.55	Volts
MAXIMUM DC OUTPUT CURRENT ( $T_C = 100\text{ }^\circ\text{C}$ ) (PER 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 ( $T_C = 100\text{ }^\circ\text{C}$ ) (PER LEG)	$I_r$	50 5.0	$\mu\text{A}$ 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

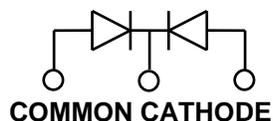


TO-254

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



# **SENSITRON**

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## **SEMICONDUCTOR**

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### **TECHNICAL DATA**

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