

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

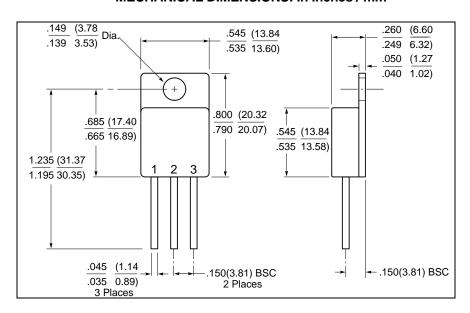
ALL RATINGS ARE AT  $T_A = 25~^{\circ}\text{C}$  UNLESS OTHERWISE SPECIFIED.

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RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE (PER LEG)		500	Volts
MAXIMUM FORWARD VOLTAGE DROP (PER LEG)			
$I_F = 10A, T_A = 25 C^{\circ}$	$V_{f}$	1.35	Volts
$I_F = 20A, T_A = 25 C^{\circ}$		1.55	
MAXIMUM DC OUTPUT CURRENT (T <sub>C</sub> = 100 °C) (PER LEG)		15	Amps
PEAK SINGLE CYCLE SURGE CURRENT t <sub>p</sub> = 8.3 msec.		150	Amps
MAXIMUM REVERSE RECOVERY TIME ( $I_f = 0.5A$ , $I_r = 1.0A$ , $I_{rr} = 0.25A$ )	t <sub>rr</sub>	35	nsec
MAXIMUM REVERSE CURRENT I <sub>r</sub> @ PIV (T <sub>C</sub> = 100°C) (PER LEG)	I <sub>r</sub>	50	μА
		5.0	mA
MAXIMUM THERMAL RESISTANCE (PER LEG)	$R_{ heta JC}$	2.0	°C/W
MAXIMUM OPERATING TEMPERATURE RANGE	T <sub>OP</sub>	-65 to +200	°C
JUNCTION CAPACITANCE V <sub>R</sub> = 10Vdc, f = 1MHz	CJ	150	pF
V <sub>SIG</sub> = 50mV (p-p) (Max)			

<sup>\*</sup> 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**





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