

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

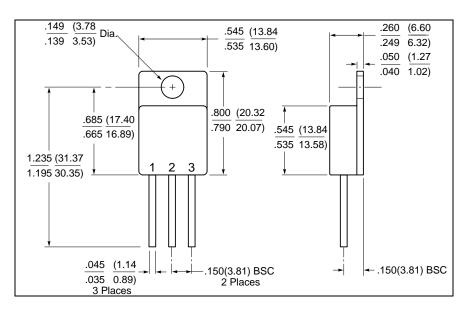
ALL RATINGS ARE AT  $T_A = 25$  °C UNLESS OTHERWISE SPECIFIED.

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RATING	SYMBOL	MAX.	UNITS		
PEAK INVERSE VOLTAGE (PER LEG)	PIV	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 <sub>f</sub> = 0.5A, I <sub>r</sub> = 1.0A, I <sub>rr</sub> = 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)		2.0	°C/W		
MAXIMUM OPERATING TEMPERATURE RANGE		-65 to +200	°C		
JUNCTION CAPACITANCE V <sub>R</sub> = 10Vdc, f = 1MHz	С	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**





#### **TECHNICAL DATA**

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