



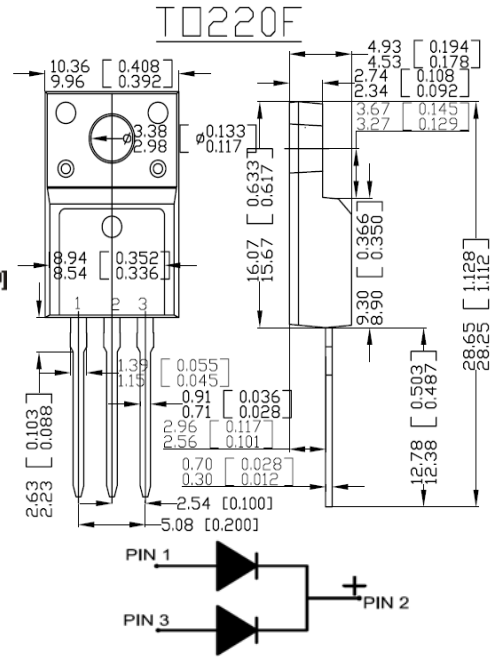
TO-220F Plastic-Encapsulate Transistors

FEATURES:

- Plastic package Underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Metal silicon junction Majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High temperature soldering guaranteed: 250 /10 seconds, 0.25''(6.35mm) from case

MECHANICAL DATA

Case : TO-220F molded plastic
 Terminals : Leads solderable per MIL-STD-750 Method 2026
 Polarity : As marked
 Mounting Position : Any
 Mounting Torque 5 in - lbs.max
 Weight : 0.08 ounce, 2.24 grams



Dimensions in millimeters and (inches)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
 Single phase half wave, 60 Hz resistive or inductive load.
 For capacitive load, derate current by 20%.

Characteristic	Symbol	MBR1090	MBR10100	Units
Maximum recurrent peak reverse voltage	V_{RRM}	90	100	Volts
Maximum RMS voltage	V_{RMS}	63	70	Volts
Maximum DC blocking voltage	V_{DC}	90	100	Volts
Maximum average forward rectified current at $T_C=125^\circ C$	$I_{(AV)}$	10		Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)(Per leg)	I_{FSM}	120		Amps
Maximum instantaneous forward voltage (Per leg)(NOTE 2) $I_F=5.0A$	V_F	0.85		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Per leg)(NOTE 2) $T_C=25^\circ C$ $T_C=125^\circ C$	I_R	0.5 50.0		mA
Typical thermal resistance(Per leg)(NOTE 1)	R_{th-JC}	5.0		$^\circ C/W$
Operating temperature range	T_J	-65to+150		$^\circ C$
Storage temperature range	T_{Stg}	-65to+150		$^\circ C$

NOTES:
 (1) Thermal resistance from junction to case
 (2) Pulse test : 300 us pulse width, 1% duty cycle

MBR1090 THUR MBR10100

