

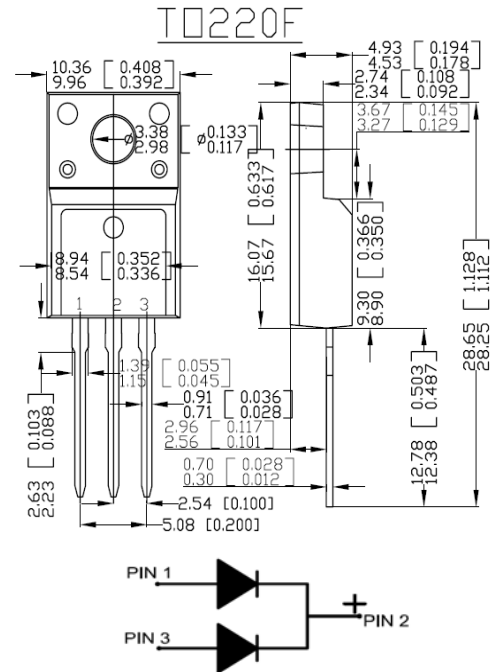
MBR20100CT MBR20200CT

FEATURES:

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

MECHANICAL DATA

Case : JEDEC ITO-220AB 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	MBR20100CT	MBR20200CT	Units
Maximum recurrent peak reverse voltage	V_{RRM}	100	200	Volts
Maximum RMS voltage	V_{RMS}	70	140	Volts
Maximum DC blocking voltage	V_{DC}	100	200	Volts
Maximum average forward rectified current at $T_C = 125^\circ\text{C}$ (Per Pak)	$I_{(AV)}$	20		Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) (Per leg)	I_{FSM}	150		Amps
Maximum instantaneous forward voltage (Per leg)(NOTE 2) $I_F = 20\text{A}$	V_F	0.86	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Per leg)(NOTE 2) $T_C = 25^\circ\text{C}$ $T_C = 125^\circ\text{C}$	I_R	0.15 150		mA
Typical thermal resistance (Per leg)(NOTE 1)	R_{th-JC}	3.5		$^\circ\text{C/W}$
Operating temperature range	T_J	-65 to +150		$^\circ\text{C}$
Storage temperature range	T_{stg}	-65 to +175		$^\circ\text{C}$

NOTES:

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

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

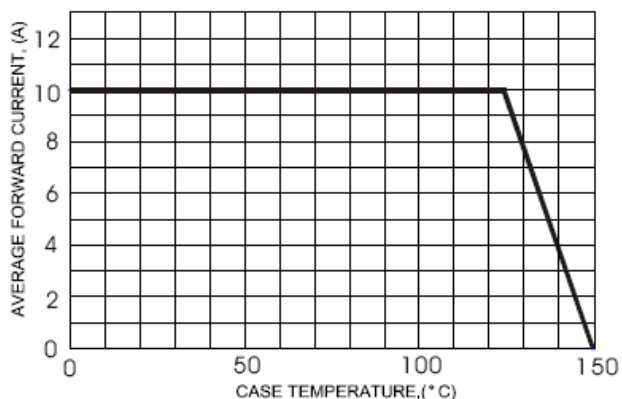


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

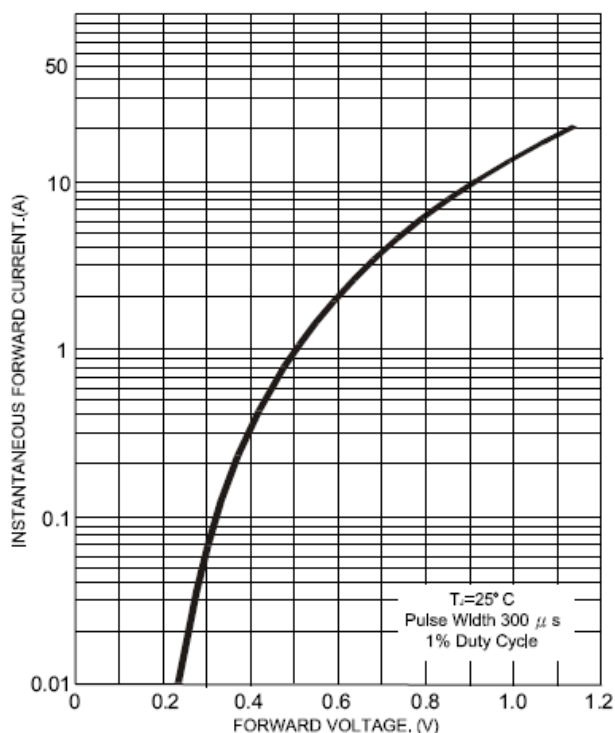


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

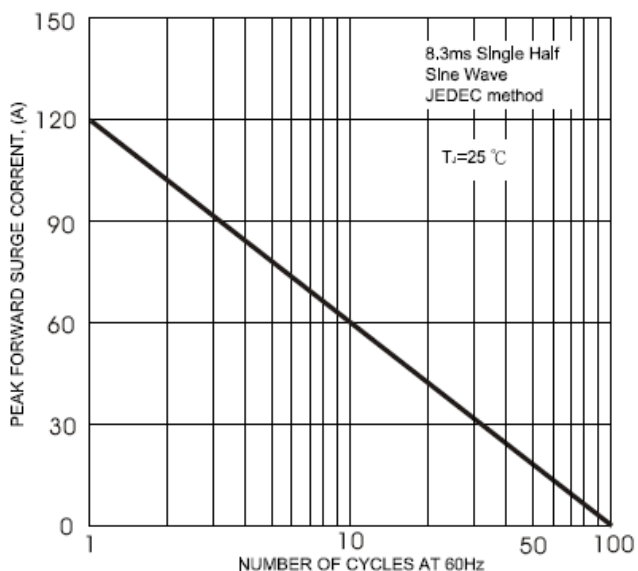


FIG.4- TYPICAL JUNCTION CAPACITANCE

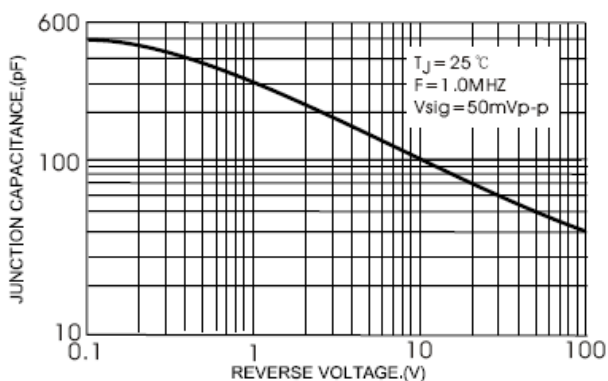


FIG.5- TYPICAL REVERSE CHARACTERISTICS

