

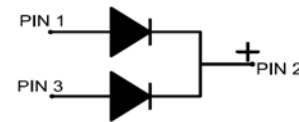
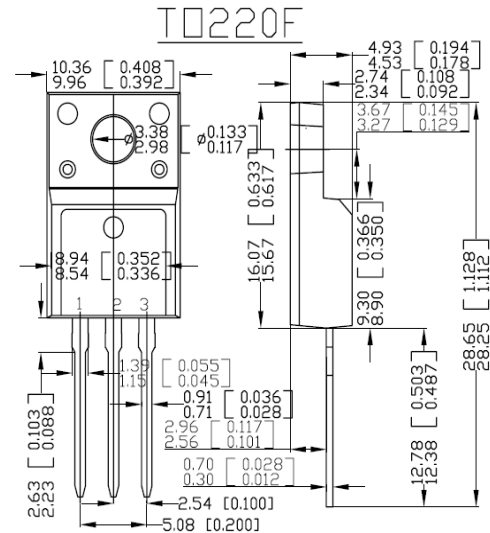
MBR20100CT MBR20200CT

FEATURES:

- Plastic package Underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive centertap
- Metal silicon junction Majority carrier conduction
- Low powerloss,high efficiency
- High current capability,low forward voltage drop
- High temperature soldering guaranteed: 250°C/10seconds, 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)	V_F	0.86	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Per leg)(NOTE 2)	I_R	$T_C=25^\circ\text{C}$ $T_C=125^\circ\text{C}$	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	-65to+150		$^\circ\text{C}$
Storage temperature range	T_{Stg}	-65to+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

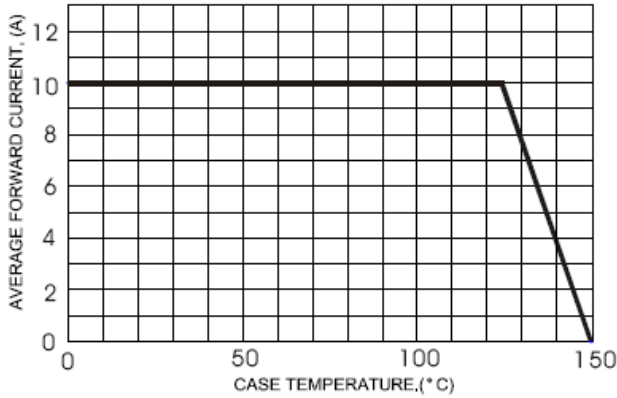


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

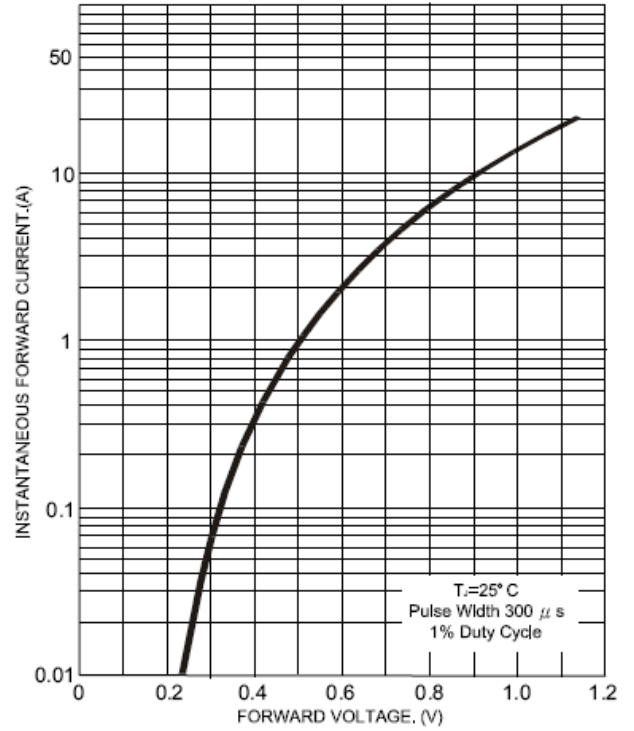


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

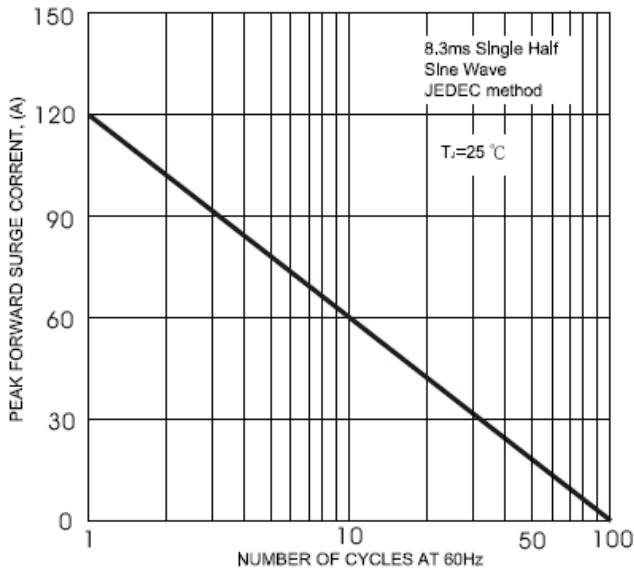


FIG.5- TYPICAL REVERSE CHARACTERISTICS

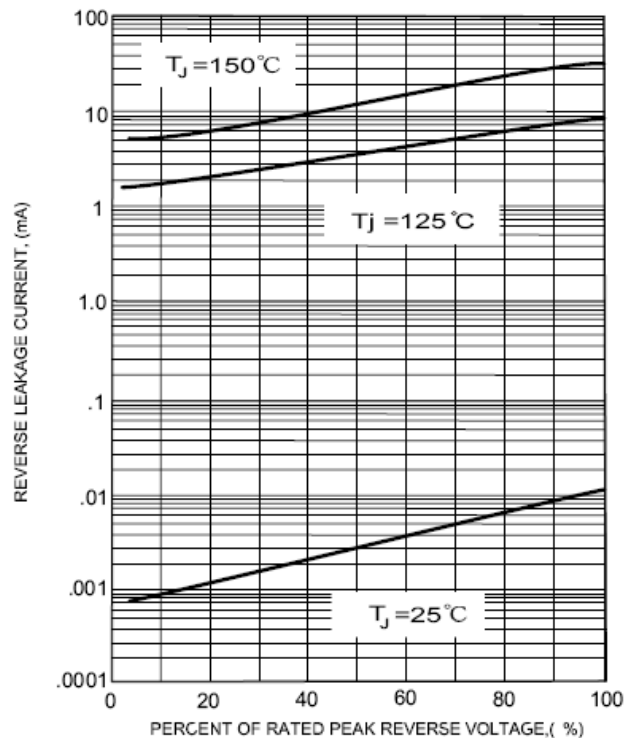


FIG.4- TYPICAL JUNCTION CAPACITANCE

