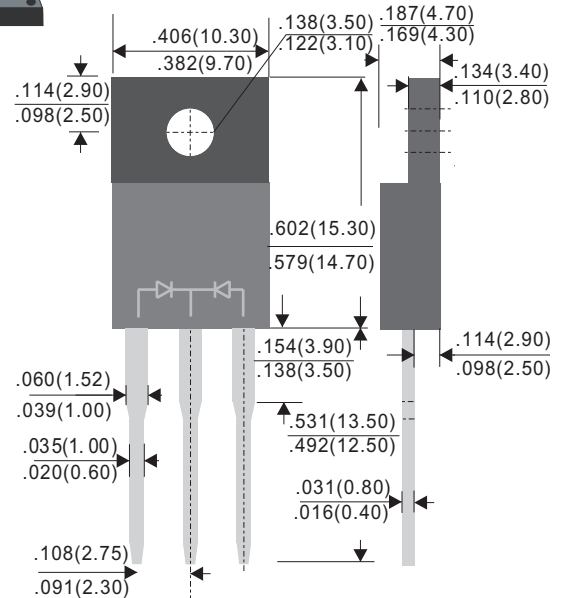


### FEATURES

- \* Low switching noise
- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge capability
- \* RoHS product for packing code suffix "G"
- Halogen free product for packing code suffix "H"
- \* EPI WAFER

### MECHANICAL DATA

- \* Case: ITO-220 Molded plastic
- \* Epoxy: UL 94V-O rate flame retardant
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 1.7 gram



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

RATINGS	SYMBOL	MBR 2020CF	MBR 2040CF	MBR 2050CF	MBR 2060CF	MBR 2080CF	MBR 20100CF	MBR 20150CF	MBR 20200CF	UNIT
		MBR 2020CF	MBR 2040CF	MBR 2050CF	MBR 2060CF	MBR 2080CF	MBR 20100CF	MBR 20150CF	MBR 20200CF	
Maximum Recurrent Peak Reverse Voltage	VRRM	20	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	VRMS	14	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	VDC	20	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current	IO	20.0								Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	150								Amps
Typical Thermal Resistance (Note 1)	ROJC	3.0								C/W
Typical Junction Capacitance (Note 2)	CJ	400	300			270		210		PF
Operating Temperature Range	TJ	-55 to +150								C
Storage Temperature Range	TSTG	-55 to +175								C

CHARACTERISTICS	SYMBOL	MBR 2020CF	MBR 2040CF	MBR 2050CF	MBR 2060CF	MBR 2080CF	MBR 20100CF	MBR 20150CF	MBR 20200CF	UNIT
		MBR 2020CF	MBR 2040CF	MBR 2050CF	MBR 2060CF	MBR 2080CF	MBR 20100CF	MBR 20150CF	MBR 20200CF	
Maximum Forward Voltage at 10.0A DC, pre leg	VF	0.64		0.74		0.83		0.87		Volts
Maximum Average Reverse Current at	@TA=25 C	0.2								mAmps
Rated DC Blocking Voltage	@TA=125 C	20								

NOTES :1. Thermal Resistance (Junction to Case): Vertical PCBoard Mounting, 0.5" (12.7mm) Lead Length.  
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

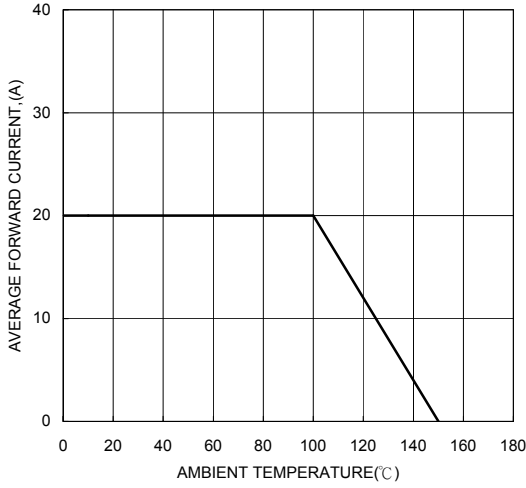


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

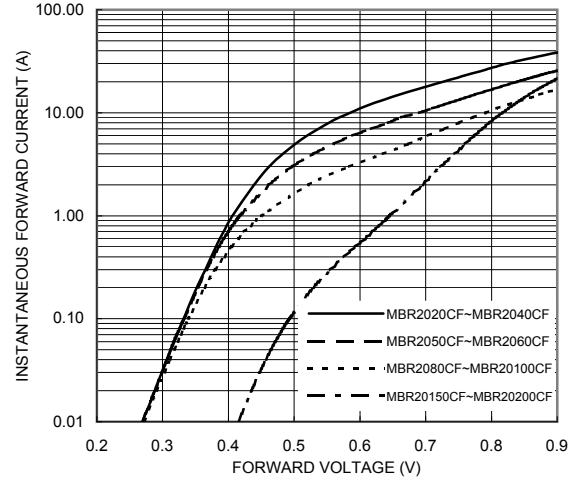


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

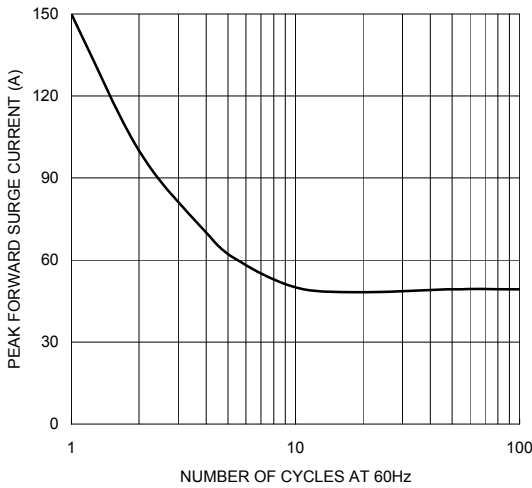


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

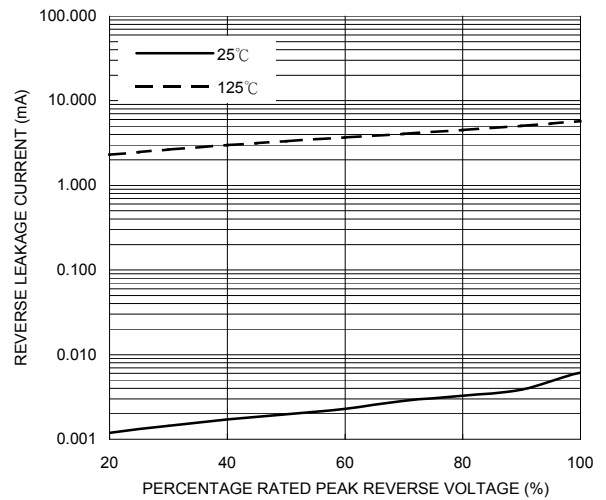


FIG. 5-TYPICAL JUNCTION CAPACITANCE

