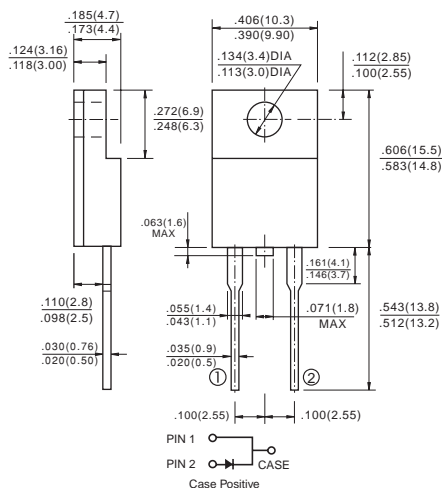




ITO-220AC



Dimensions in inches and (millimeters)

- ✧ Cases: ITO-220AC molded plastic body
- ✧ Polarity: As marked
- ✧ Mounting position: Any
- ✧ Mounting torque: 5 in. - lbs. max
- ✧ Weight: 0.08 ounce, 2.24 grams

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%

Type Number	Symbol	MBRF 2035	MBRF 2045	MBRF 2050	MBRF 2060	MBRF 2090	MBRF 20100	MBRF 20150	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	35	45	50	60	90	100	150	V
Maximum RMS Voltage	V _{RMS}	24	31	35	42	63	70	105	V
Maximum DC Blocking Voltage	V _{DC}	35	45	50	60	90	100	150	V
Maximum Average Forward Rectified Current at Tc=125°C	I _(AV)	20							A
Peak Repetitive Forward Current (Rated V _R , Square Wave, 20KHz) at Tc=125°C	I _{FRM}	40							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	150							A
Peak Repetitive Reverse Surge Current (Note 1)	I _{RRM}	1.0			0.5				A
Maximum Instantaneous Forward Voltage at: (Note 2) I _F =20A, T _C =25°C I _F =20A, T _C =125°C	V _F	0.75 0.65		0.82 0.72		0.95 0.87		1.02 0.98	V
Maximum Instantaneous Reverse Current @ Tc =25 °C at Rated DC Blocking Voltage (Note2) @ Tc=125 °C	I _R	0.2 15		0.2 10		0.1 5.0			mA mA
Voltage Rate of Change (Rated V _R)	dV/dt	10,000							V/uS
Typical Junction Capacitance	C _j	560				420			pF
Maximum Typical Thermal Resistance(Note 3)	R _{θJC}	3.0							°C/W
Operating Junction Temperature Range	T _J	-65 to +150							°C
Storage Temperature Range	T _{STG}	-65 to +175							°C

Notes: 1. 2.0us Pulse Width, f=1.0 KHz
2. Pulse Test: 300us Pulse Width, 1% Duty Cycle
3. Mounted on Heatsink Size of 2 in x 3 in x 0.25 in Al-Plate.

RATINGS AND CHARACTERISTIC CURVES (MBRF2035 THRU MBRF20150)

FIG.1- FORWARD CURRENT DERATING CURVE

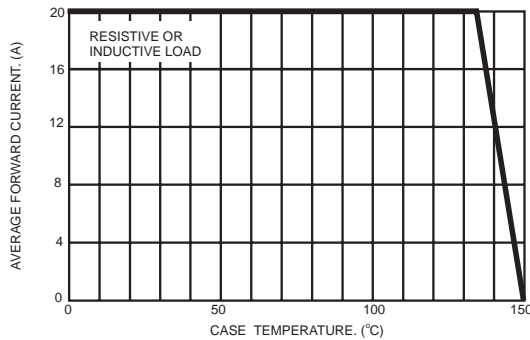


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

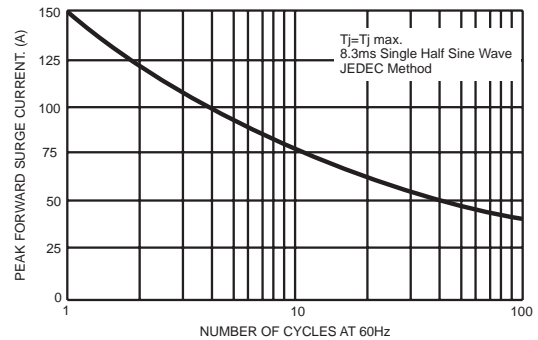


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

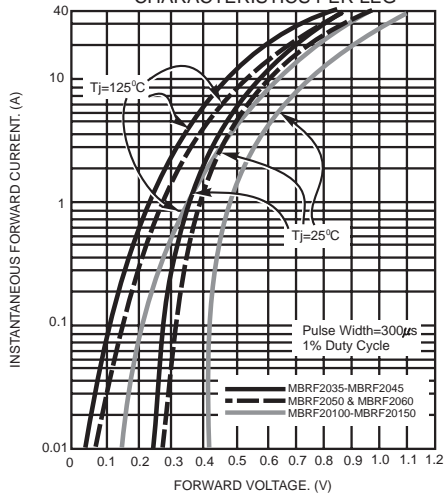


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER LEG

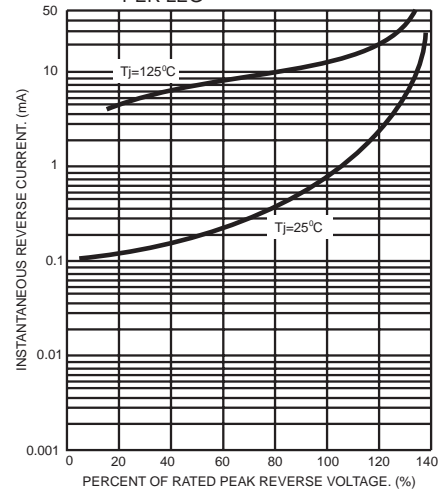


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

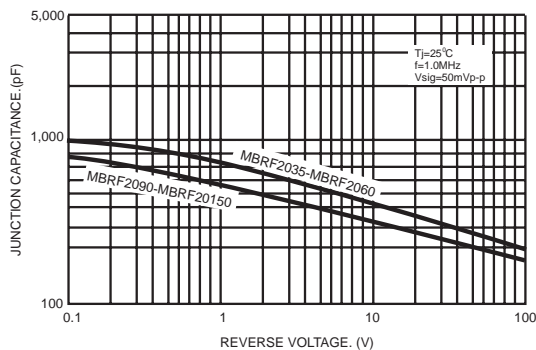


FIG.6- TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG

