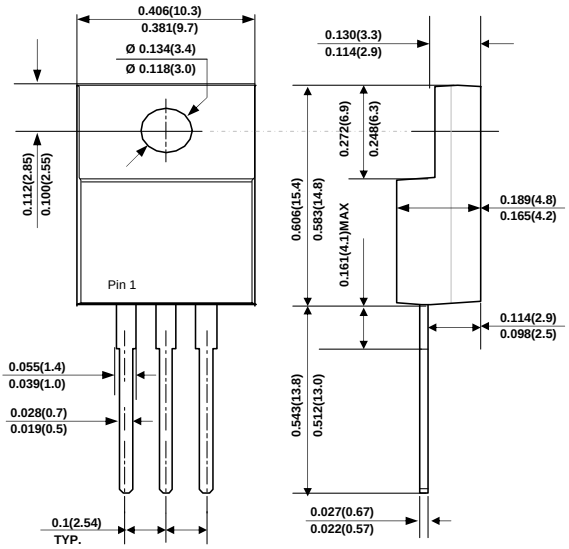
MBRF3020CT THRU MBRF30200CT

30 AMPERS ISOLATION SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 and 200 Volts Forward Current - 30.0 Ampere

ITO-220AB



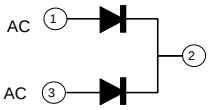
Dimensions in inches and (millimeters)

FEATURES

- Flame Retardant Epoxy Molding Compound.
- Metal silicon junction, majority carrier conduction.
- Low power loss, High efficiency, High current capability.
- Guardring for overvoltage protection.
- Electrically Isolated. No Isolation Hardware Required.
- In compliance with EU Rohs 2002/95/EC directives.
- For use low voltage, high frequency inverters froo wheeling, and polarlity protection application.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0.

MECHANICAL DATA

Case: ITO-220AB, Full molded plastic package.
Terminals: Solderable per MIL-STD-750，Method 2026
Standard Packaging : Tube.
Polarity: As marked.
Mounting Position: Any.
Weight: 0.0655 ounces, 1.859 grams.



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specif ied.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

PARAMETER	SYMBOLS	MBRF 3020CT	MBRF 3040CT	MBRF 3045CT	MBRF 3050CT	MBRF 3060CT	MBRF 3080CT	MBRF 30100CT	MBRF 30150CT	MBRF 30200CT	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	45	50	60	80	100	150	200	Volts
Maximum RMS voltage	V_{RMS}	14	28	31.5	35	42	56	70	105	140	Volts
Minimum DC Breakdown Voltage	V_{DC}	20	40	45	50	60	80	100	150	200	Volts
Average Rectified current	$I_{F(AV)}$	30									Amp
Non-repetitive Peak Forward Surge Current at 8.3ms half sine-wave superimposed on rated load (JEDEC mathod)	I_{FSM}	275									Amps
Maximum Forward Voltage at I_F=30A	V_F	0.70			0.75		0.80		0.9		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage T_J= 25℃	I_R	0.05									mA
Typical Thermal Resistance	$R_{\theta JC}$	1.5									℃/W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-50 ~ +150		-65 ～ +175							℃

Note: Both bonding and chip structure are available.

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RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

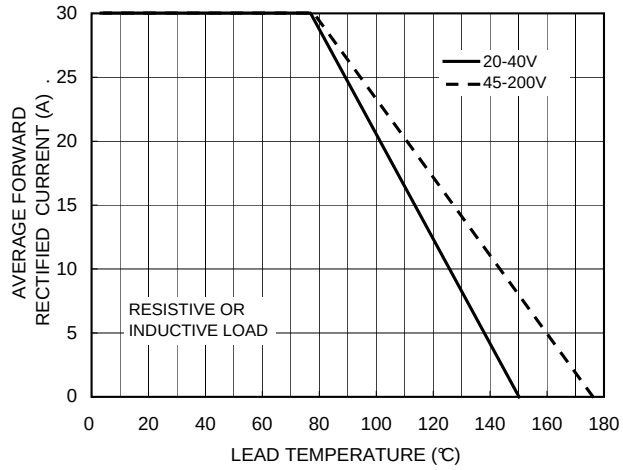

FIG. 2-TYPICAL FORWARD SURGE CHARACTERISTICS

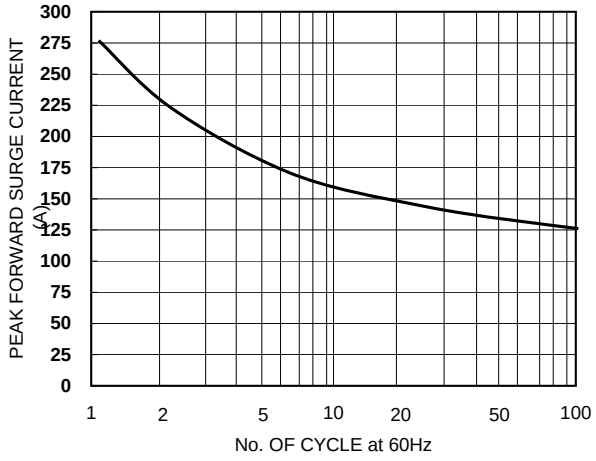

FIG. 3-TYPICAL REVERSE CHARACTERISTICS

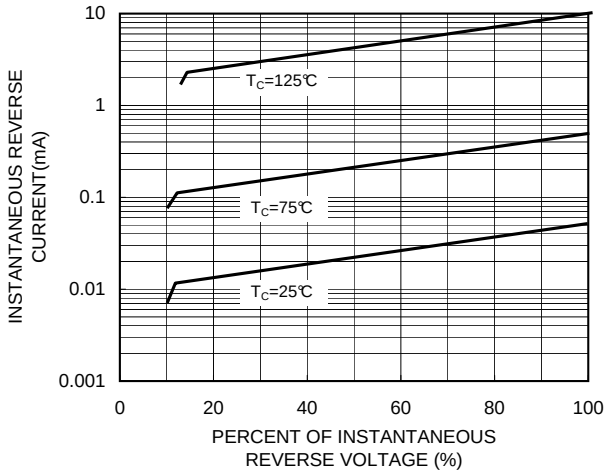

FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS