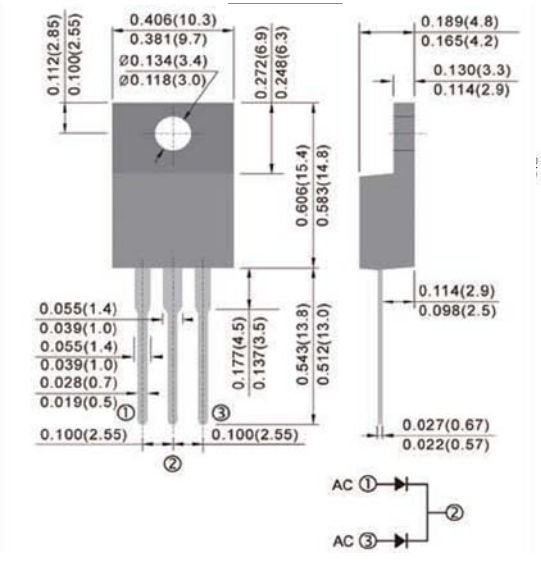
MBRF3040CT THRU MBRF30200CT

SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage 40 to 200 Volts Forward Current 30 Amperes

ITO-220AB



Unit: inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency.
- High surge capacity
- For use in low voltage, high frequency inverters, free wheeling and polarity protection applications
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case:ITO-220AB molded plastic
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any
- Weight: 0.055 ounces, 1.5615 grams.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%

PARAMETER	SYMBOL	MBRF3040CT	MBRF3045CT	MBRF3050CT	MBRF3060CT	MBRF3080CT	MBRF3090CT	MBRF30100CT	MBRF30150CT	MBRF30200CT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	40	45	50	60	80	90	100	150	200	V
Maximum RMS Voltage	VRMS	28	31.5	35	42	56	63	70	105	140	V
Maximum DC Blocking Voltage	VDC	40	45	50	60	80	90	100	150	200	V
Maximum Average Forward Current (see Fig.1)	IF[AV]	30									A
Peak Forward Surge Current:8.3ms single half sine wave superimposed on rated load(JEDEC method)	IFSM	275									A
Maximum Forward Voltage at 10A, per leg	VF	0.7		0.75		0.8			0.9		V
Maximum DC Reverse Current Tj=25C at Rated DC Blocking Voltage Tj=125C	IR	0.1 20						0.05 20			mA
Typical Thermal Resistance	RJC	1.4									°C/W
Operating Junction and Storage Temperature Range	TJ,TSTG	-50 to +150		-65 to +175							°C

Note: Both bonding and Chip structure are available.

RATING AND CHARACTERISTIC CURVES

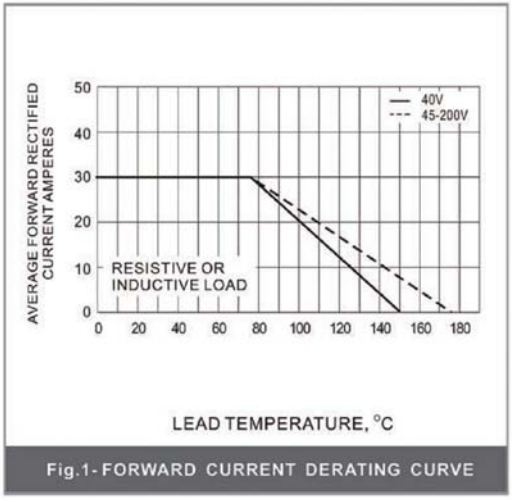


Fig.1- FORWARD CURRENT DERATING CURVE

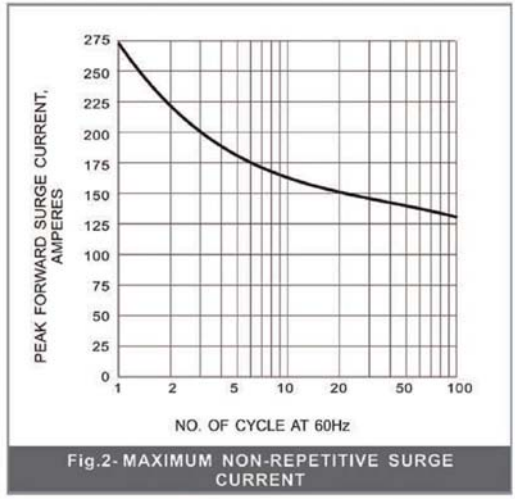
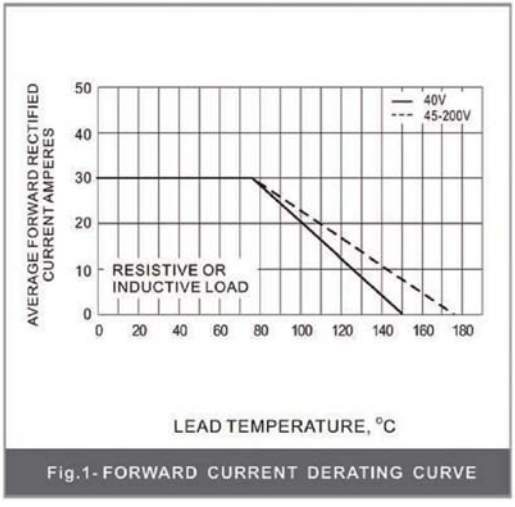


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT



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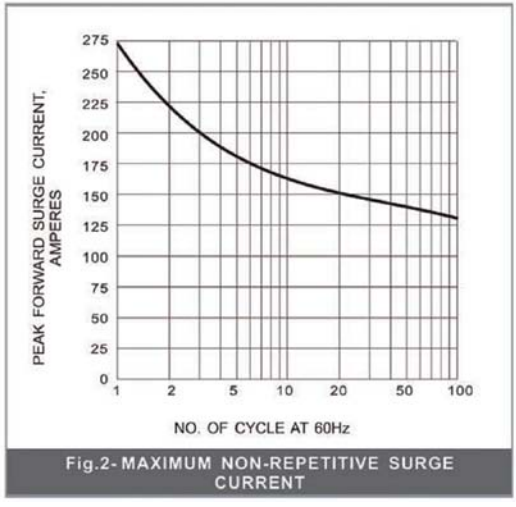

Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT