

# MBR1040~MBR10200

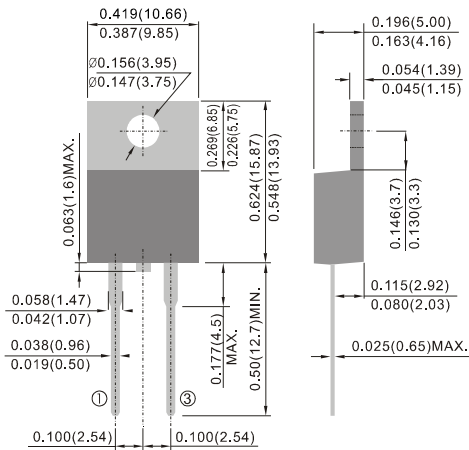
## SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 40 to 200 Volts CURRENT 10 Amperes



### TO-220AC

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 current capability
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- Lead free in comply with EU RoHS 2011/65/EU directives

### MECHANICAL DATA

- Case: TO-220AC molded plastic
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.

### 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%

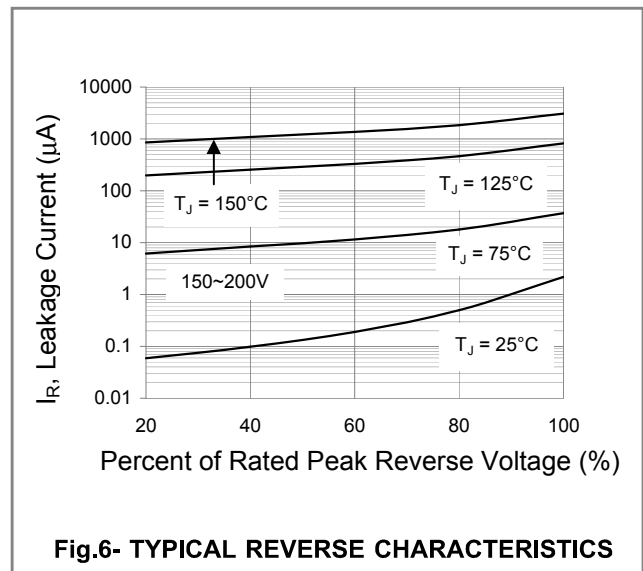
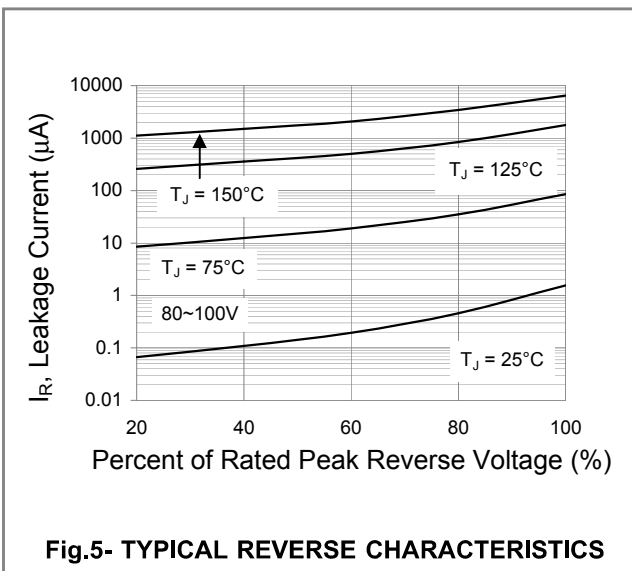
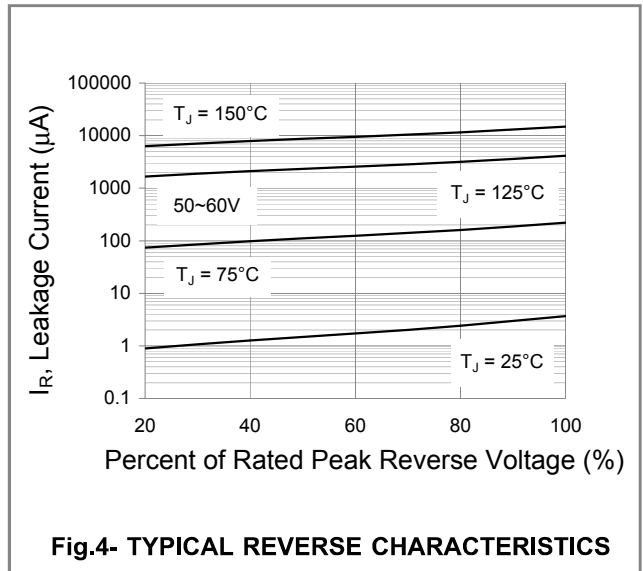
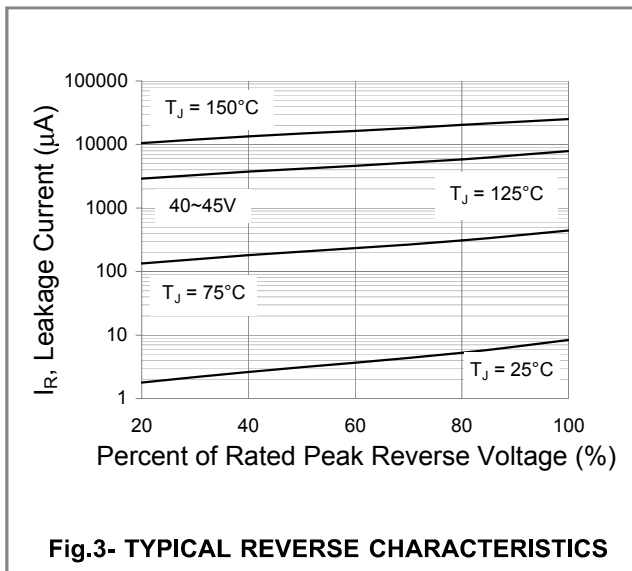
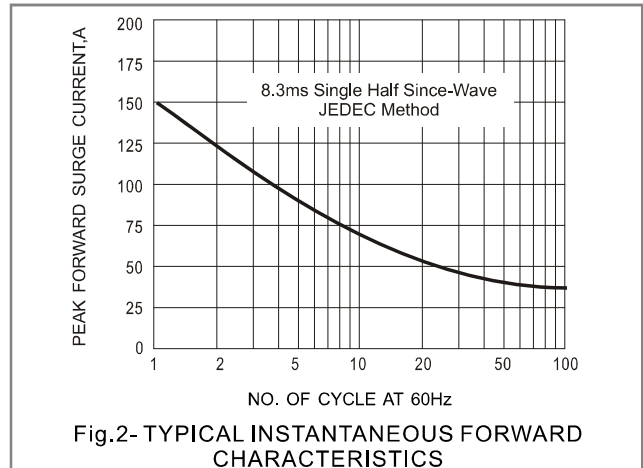
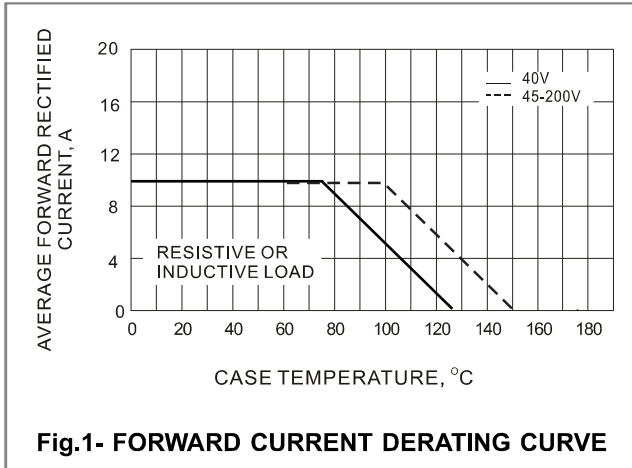
PARAMETER	SYMBOL	MBR 1040	MBR 1045	MBR 1050	MBR 1060	MBR 1080	MBR 1090	MBR 10100	MBR 10150	MBR 10200	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	45	50	60	80	90	100	150	200	V
Maximum RMS Voltage	$V_{RMS}$	28	31.5	35	42	56	63	70	105	140	V
Maximum DC Blocking Voltage	$V_{DC}$	40	45	50	60	80	90	100	150	200	V
Maximum Average Forward Current (See fig.1)	$I_{F(AV)}$	10									A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	150									A
Maximum Forward Voltage at 10A, per leg	$V_F$	0.7		0.75		0.85		0.95			V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	$I_R$						0.2 20				mA
Typical Thermal Resistance	$R_{\theta JC}$						3				$^{\circ}C / W$
Operating and Storage Junction Temperature Range	$T_J, T_{STG}$	-65 to + 125				-65 to + 150				$^{\circ}C$	

Notes :

Both Bonding and Chip structure are available.

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## RATING AND CHARACTERISTIC CURVES



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