

MBRD1020CT~MBRD10100CT

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 100 Volt **CURRENT** 10 Amper

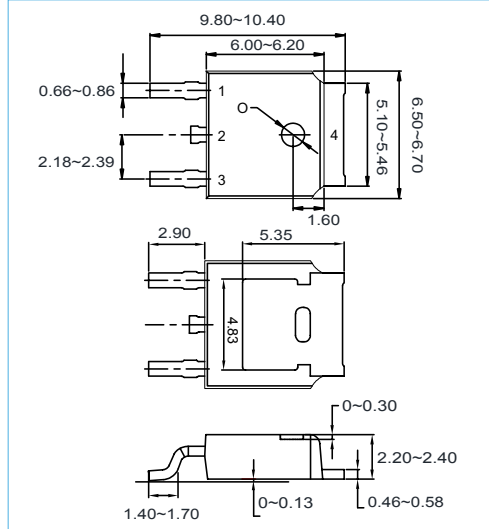
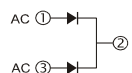
TO-252(DPAK) Unit:mm

FEATURES

- Extremely Fast Switching
- Extremely Low Forward Drop.
- High Current Capability, High Efficiency
- Lead free in compliance with EU RoHS

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load.

PARAMETER	SYMBOL	MBRD1020CT	MBRD1030CT	MBRD1040CT	MBRD1045CT	MBRD1060CT	MBRD1080CT	MBRD10100CT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	45	60	80	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	31.5	42	56	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	45	60	80	100	V
Maximum Average Forward Current (See Figure 1)	I _{F(AV)}	10							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	150							A
Maximum Forward Voltage at 5.0A	V _F	0.65				0.75	0.85		V
Maximum DC Reverse Current at Rated DC Blocking Voltage T _J =25°C T _J =100°C	I _R	0.5 50				0.50 25			mA
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +150							°C

MBRD1020CT~MBRD10100CT

RATING AND CHARACTERISTIC CURVES

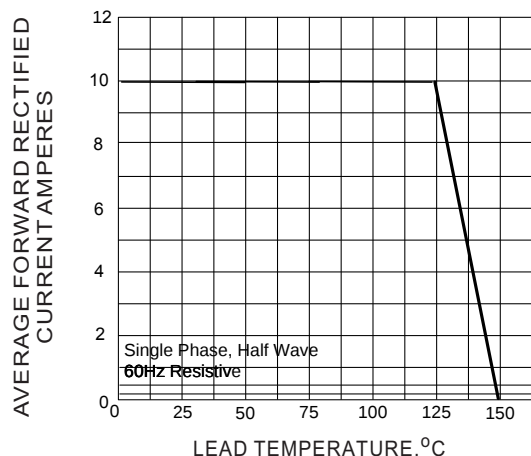


Fig.1-FORWARD CURRENT DERATING CURVE

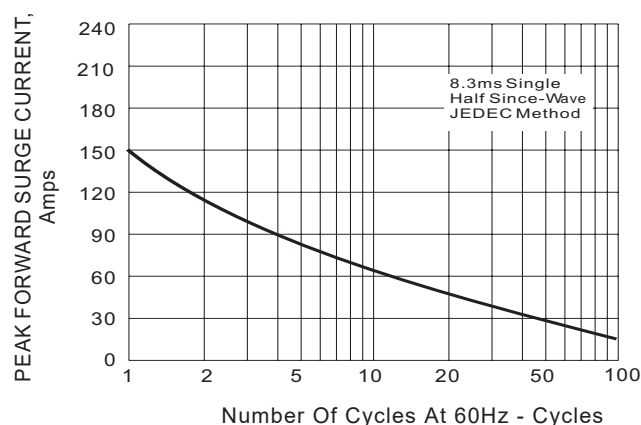


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

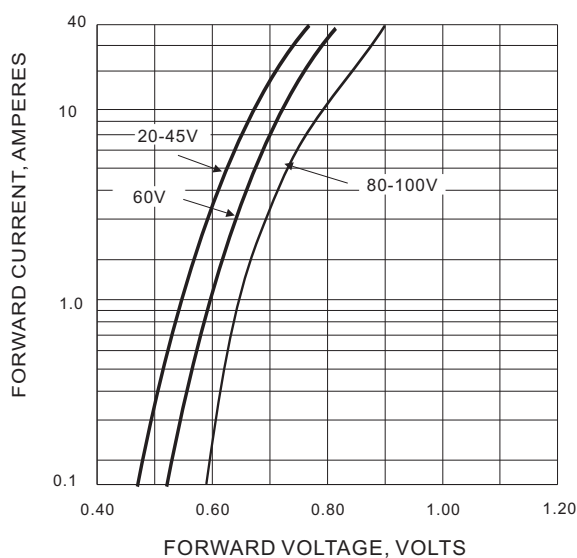


Fig.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

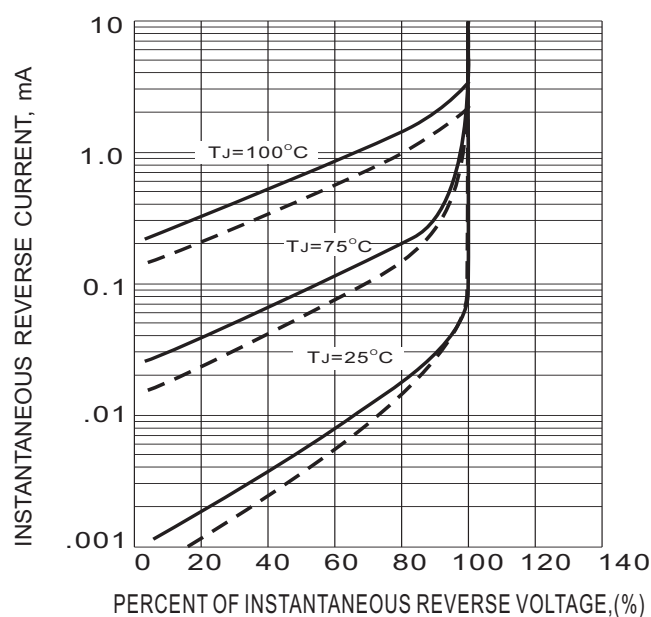


Fig.4- TYPICAL REVERSE CHARACTERISTIC

MBRD1020CT~MBRD10100CT

ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
MBRD1020CT~MBRD10100CT	TO-252	13 Inch	2500