



MBR1040CD~MBR10200CD

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 40 to 200 Volts

CURRENT 10 Amperes

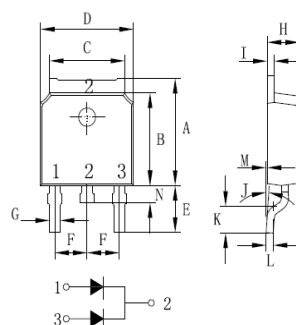
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For through hole applications
- Low profile package
- Built-in strain relief
- Low power loss, High efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Lead free in comply with EU RoHS

MECHANICAL DATA

- Case: TO-252 molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marking

TO-252 (DPAK)



TO-252 (DPAK)

Unit:mm

DIM	MIN	MAX
A	6.85	7.25
B	5.90	6.30
C	5.13	5.53
D	6.40	6.80
E	2.90	3.30
F	2.19	2.39
G	0.45	0.85
H	2.20	2.40
I	0.41	0.61
J	0°	8°
K	1.45	1.85
L	0.41	0.61
M	0.00	0.12
N	0.60	1.00

MAXIMUM RATINGS

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 1040CD	MBR 1045CD	MBR 1050CD	MBR 1060CD	MBR 1080CD	MBR 1090CD	MBR 10100CD	MBR 10150CD	MBR 10200CD	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 (See Figure 1)	I _{F(AV)}	10									A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	100									A
Maximum Forward Voltage at 5.0A per leg	V _F	0.60		0.75		0.85			0.92		V
Maximum DC Reverse Current at T _j =25°C Rated DC Blocking Volutag T _j =100°C	I _R	0.05 20									mA
Typical Thermal Resistance	R _{θJC}	3.0									°C / W
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-55 to + 150							-55 to +175		°C
Junction Capaitance(Note 1)	CJ	420		360		280			200		pF

Note 1: Measured at 1.0 MHz and applied reverse voltage of 4.0Vd



RATING AND CHARACTERISTIC CURVES

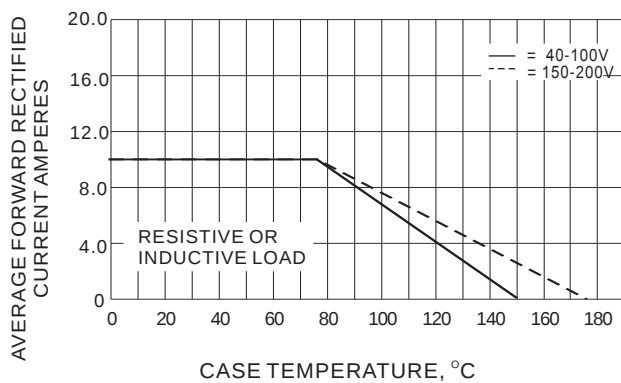


Fig.1- FORWARD CURRENT DERATING CURVE

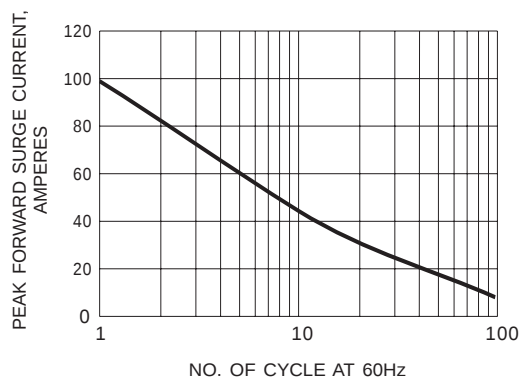


Fig.2- MAXIMUM NON - REPETITIVE FORWARD SURGE CURRENT

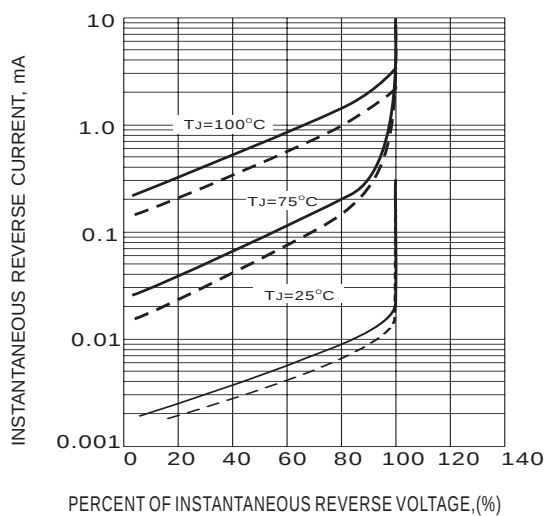


Fig.3- TYPICAL REVERSE CHARACTERISTICS

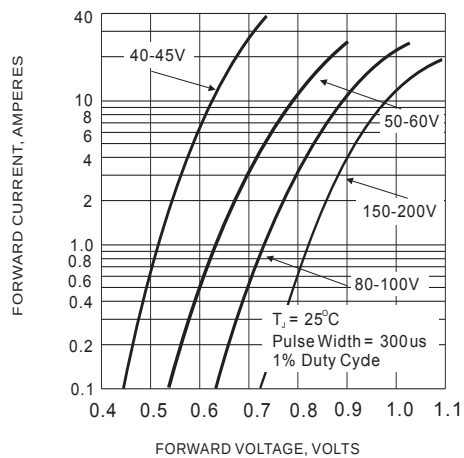


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC