



MBR1040CD~MBR10200CD

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE	40 to 200 Volts
CURRENT	10 Amperes

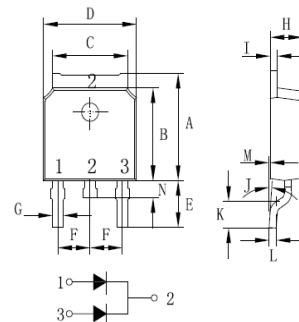
FEATURES

- 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)



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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 $T_J=25^\circ\text{C}$ Rated DC Blocking Voltage $T_J=100^\circ\text{C}$	I_R						0.05				mA
Typical Thermal Resistance	$R_{\theta JC}$						3.0				°C / W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150							-55 to +175		°C
Junction Capacitance(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

