

20 AMPERES SCHOTTKY BARRIER RECTIFIERS

VOLTAGE	40 to 200 Volts
CURRENT	20 Amperes

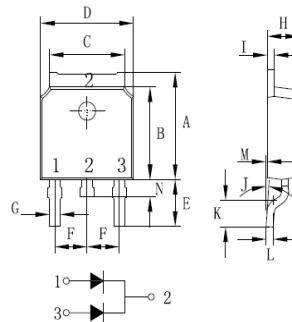
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0. 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

MECHANICAL DATA

- Case: TO-252AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any

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 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 2040CD	MBR 2045CD	MBR 2050CD	MBR 2060CD	MBR 2080CD	MBR 2090CD	MBR 20100CD	MBR 20150CD	MBR 20200CD	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)}	20									A
Peak Forward Surge Current :8.3ms single half sine- wave superimposed on rated load(JEDEC	I _{FSM}	100									A
Maximum Forward Voltage at 10A, per leg	V _F	0.7		0.8		0.85			0.92		V
Maximum DC Reverse Current T _J =25 °C at Rated DC Blocking Voltage T _J =125°C	I _R	0.05 20									mA
Typical Thermal Resistance	R _{θJC}	2									°C / W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-50 to + 150							-55to +175		°C

RATING AND CHARACTERISTIC CURVES

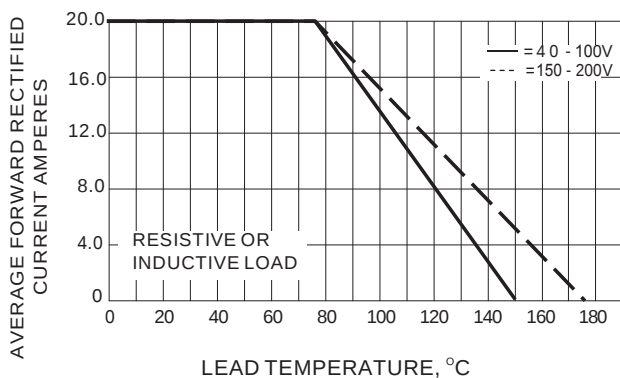


Fig.1- FORWARD CURRENT DERATING CURVE

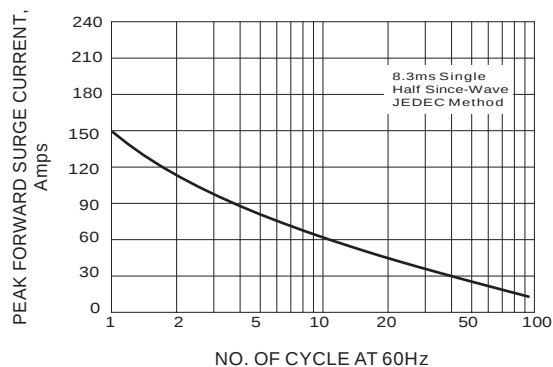


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

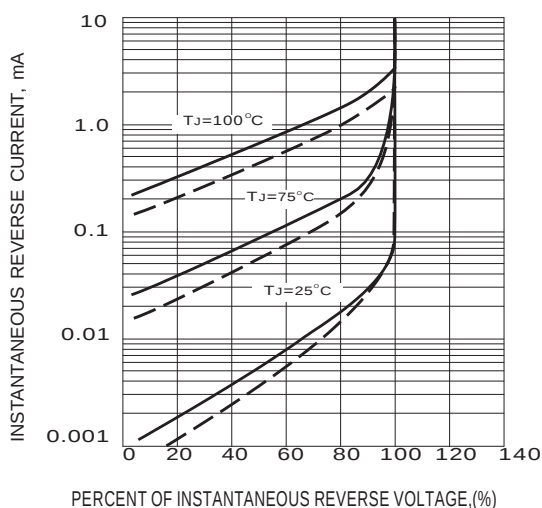


Fig.3- TYPICAL REVERSE CHARACTERISTICS

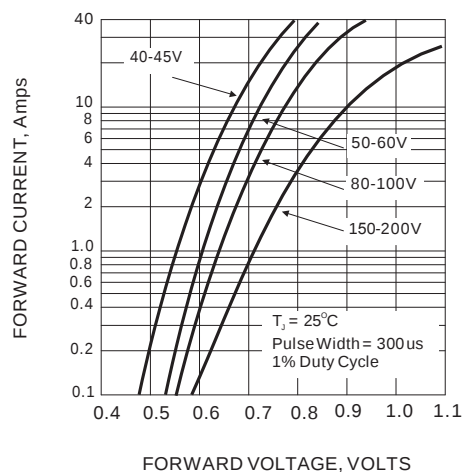


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS