

### TO-263(D<sup>2</sup>PAK) SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

VOLTAGE

40 to 200 Volts

CURRENT

20 Amperes

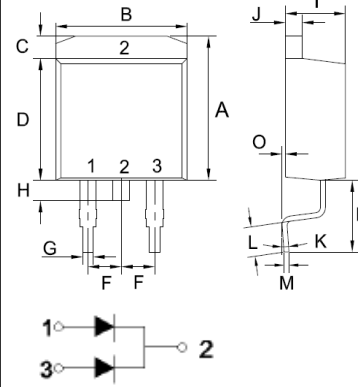
#### FEATURES

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

### TO-263 (D<sup>2</sup> PAK)



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Unit:mm		
DIM	MIN	MAX
A	10.44	10.84
B	9.81	10.21
C	1.44	1.84
D	8.80	9.20
E	4.46	4.66
F	2.44	2.64
G	0.61	1.01
H	0.70	1.30
I	4.27	4.87
J	1.07	1.47
K	0°	8°
L	2.10	2.50
M	0.30	0.46
O	0	0.25

#### 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 2040CG	MBR 2045CG	MBR 2050CG	MBR 2060CG	MBR 2080CG	MBR 2090CG	MBR 20100CG	MBR 20150CG	MBR 20200CG	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 method)	$I_{FSM}$	150A									A
Maximum Forward Voltage at 10A, per leg	$V_F$	0.7		0.8		0.85		0.92			V
Maximum DC Reverse Current $T_J=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_J=125^\circ\text{C}$	$I_R$	0.05			0.02						mA
		20			20						
Typical Thermal Resistance	$R_{\theta JC}$	3									°C / W
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-50 to +150							-55 to +175		°C

### RATING AND CHARACTERISTIC CURVES

