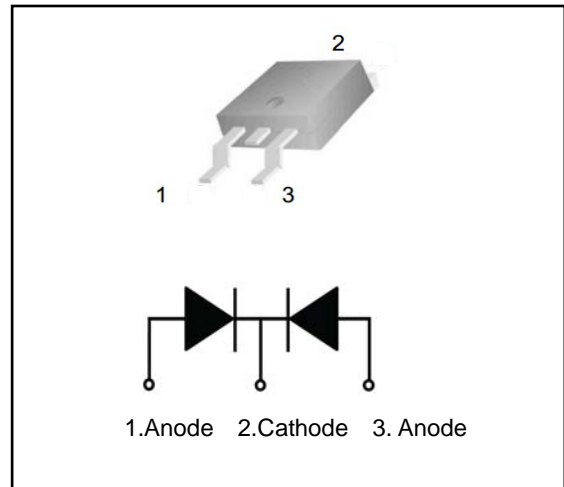


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Features:

- Low power loss,high efficiency.
High surge capacity
- For use in low voltage,high frequency inverters,
free wheeling,and polarity protection applications.
- Metal silicon junction,majority carrier conduction.
- High current Capability,low forward voltage drop.
- Guard ring for over voltage protection.



Absolute Maximum Ratings (Ta=25°C unless otherwise noted)

PARAMETER	Symbol	MBR 2040 RG	MBR 2045 RG	MBR 2050 RG	MBR 2060 RG	MBR 2080 RG	MBR 2090 RG	MBR 20100 RG	MBR 20150 RG	MBR 20200 RG	Unit
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	$V_{R(DC)}$	40	45	50	60	80	90	100	150	200	V
Maximum Average Forward Current	$I_{F(AV)}$	20									A
Peak Forward Surge Current:8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	200									A
Maximum Forward Voltage at 10A per leg	V_F	0.65		0.72		0.85		0.95			V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_j=25^\circ\text{C}$	0.1									mA
	$T_j=125^\circ\text{C}$	20									mA
Maximum Operating Junction Temperature	T_j	150				175					°C
Storage Temperature	T_{stg}	-55~+ 150				-65~+175					°C
Typical Thermal Resistance	$R_{\theta JC}$	1.4									°C/W

Typical Characteristics

RATING AND CHARACTERISTIC CURVES

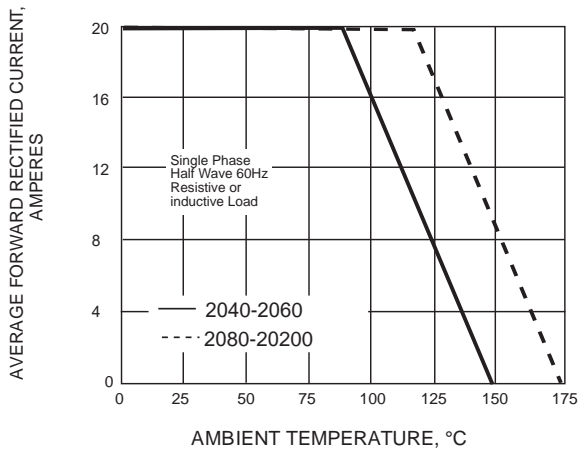


Fig.1 FORWARD CURRENT ERATING CURVE

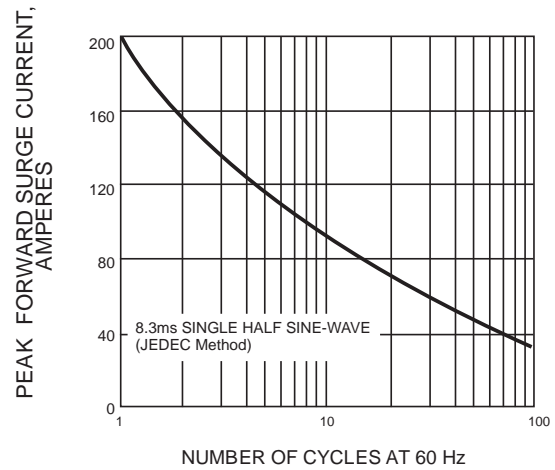


Fig.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

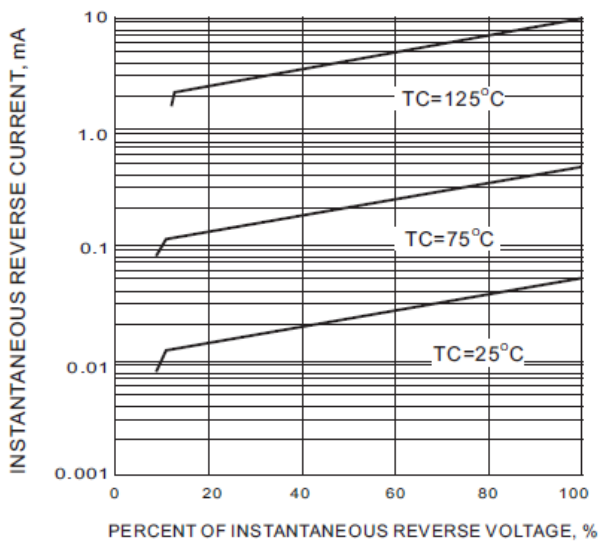


Fig.3 TYPICAL REVERSE CHARACTERISTIC

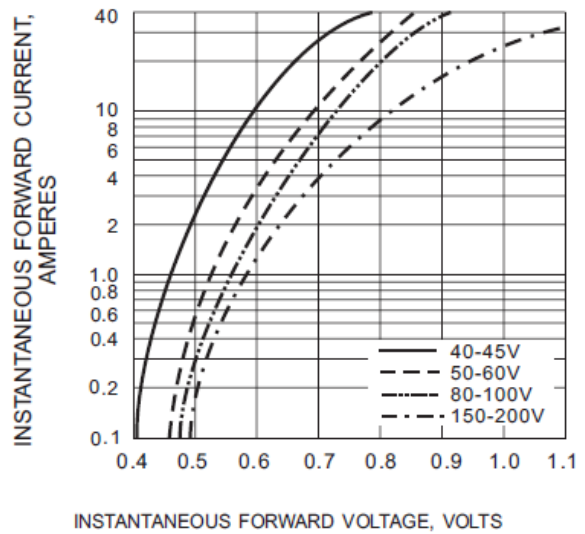
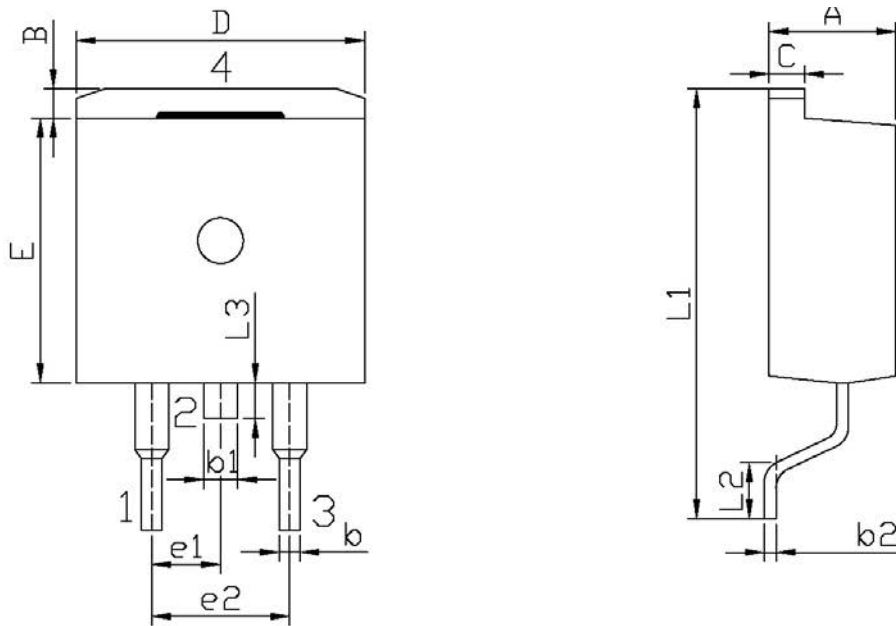


Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

Package Dimension

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Unit:mm



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	4.30	4.70	E	9.00	9.40
B	1.00	1.40	e1	2.34	2.74
b	0.70	0.90	e2	4.88	5.28
b1	1.15	1.35	L1	15.00	16.00
b2	0.40	0.60	L2	2.24	2.84
C	1.20	1.40	L3	1.20	1.60
D	9.80	10.20			

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