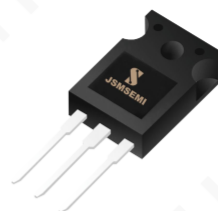


Features:

- ☐ 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.



1.Anode 2.Cathode 3. Anode

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

Parameter	Symbol	MBR 4040 PTG	MBR 4045 PTG	MBR 4050 PTG	MBR 4060 PTG	MBR 4080 PTG	MBR 4090 PTG	MBR 40100 PTG	MBR 40150 PTG	MBR 40200 PTG	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		
Maximum DC Blocking Voltage	V _{R(DC)}	40	45	50	60	80	90	100	150	200		
Maximum Average Forward Current	I _{F(AV)}	40									A	
Peak Forward Surge Current:8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	275										
Maximum Forward Voltage at 15A per leg	V _F	0.7		0.75		0.85			0.95		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _J =25℃	I _R	0.1									mA
	T _J =125℃		20									
Maximum Operating Junction Temperature	T _J	150				175					℃	
Storage Temperature	T _{stg}	-55~+150				-65~+175						
Typical Thermal Resistance	R _{θJC}	1.4									℃/W	

Typical Characteristics

RATING AND CHARACTERISTIC CURVES

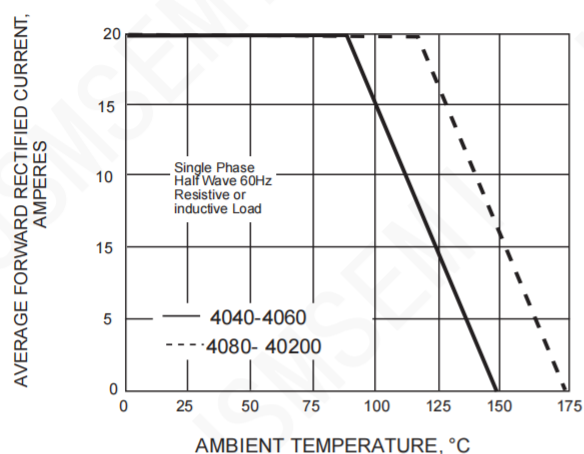


Fig.1 FORWARD CURRENT ERATING CURVE

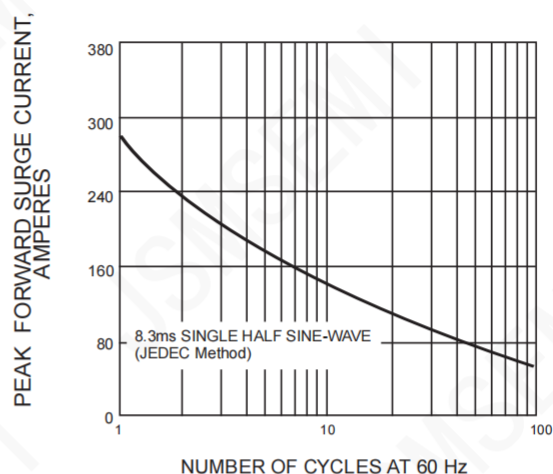


Fig.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

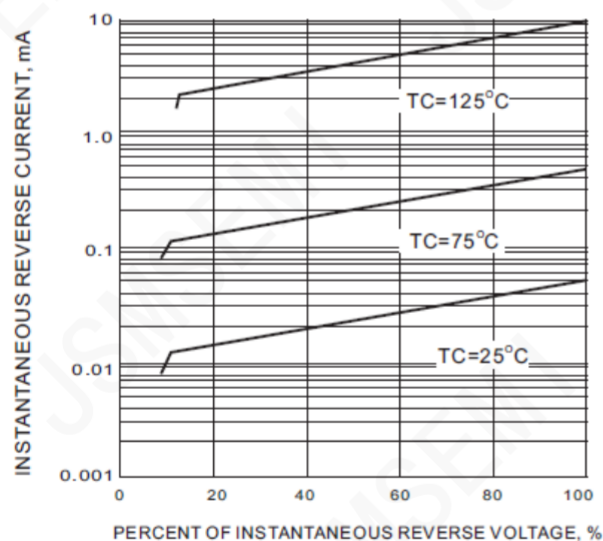


Fig.3 TYPICAL REVERSE CHARACTERISTIC

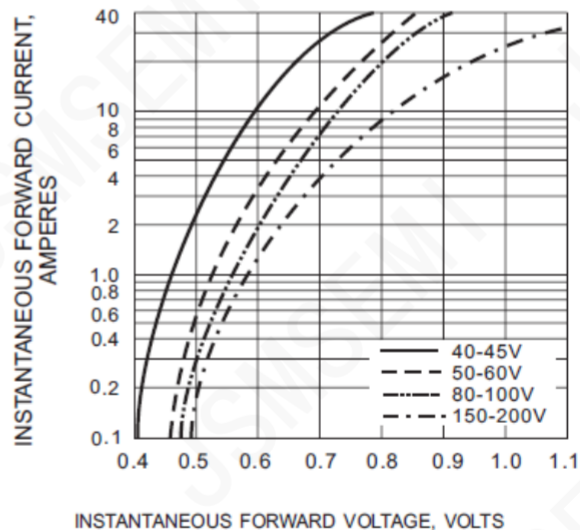
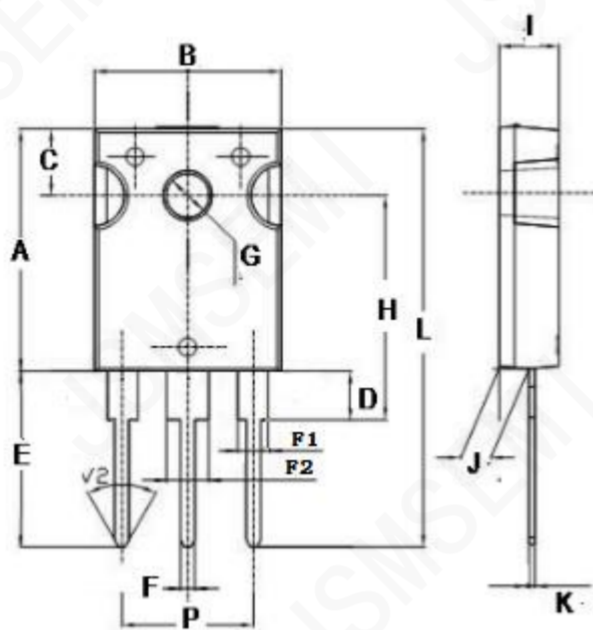


Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

Package Information

TO-247



Dim	Min	Max
A	20.0	22.0
B	15.5	16.0
C	5.7	6.3
D	4.0	4.4
E	19.0	21.0
F	1.1	1.3
G	3.5	3.8
H	18.3	20.2
I	4.9	5.2
J	2.3	2.5
K	0.55	0.65
L	39.0	42.0
P	10.7	10.9
F1	1.9	2.1
F2	2.9	3.1
mm		