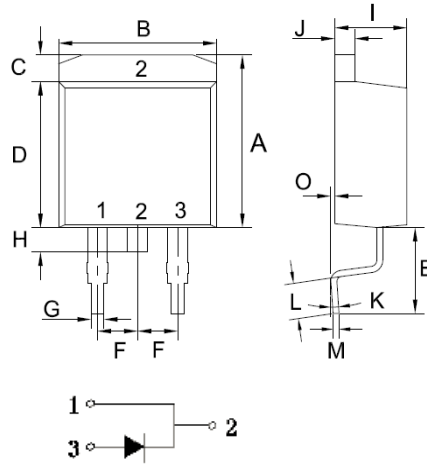


- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O

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

### Mechanical Data

- Case: TO-263/D<sup>2</sup>PAK, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Mounting Position: Any
- **Lead Free: For RoHS / Lead Free Version**



TO-263 (D <sup>2</sup> PAK)		
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 @T<sub>A</sub>=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	MBR 540G	MBR 545G	MBR 550G	MBR 560G	MBR 580G	MBR 5100G	MBR 5150G	MBR 5200G	Units	
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	40	45	50	60	80	100	150	200	V	
Working Peak Reverse Voltage	V <sub>RWM</sub>										
DC Blocking Voltage	V <sub>R</sub>										
RMS Reverse Voltage	V <sub>R(RMS)</sub>	28	31	35	42	56	70	105	140	V	
Average Rectified Output Current @T <sub>L</sub> = 75°C (Note 1)	I <sub>O</sub>	5.0								A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	100								A	
Forward Voltage @I <sub>F</sub> = 5A	V <sub>FM</sub>	0.55		0.70		0.85		0.92		V	
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C	I <sub>RM</sub>	0.1								20	mA
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	350		280				200		pF	
Typical Thermal Resistance (Note 1)	R <sub>θJA</sub>	15								°C/W	
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-55 to +125			-55 to +150					°C	

Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

## RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

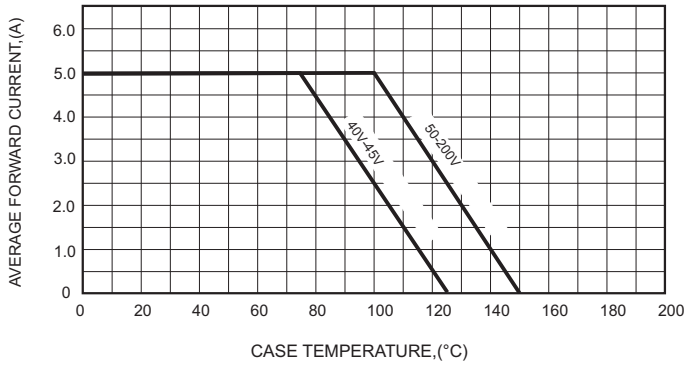


FIG.2-TYPICAL FORWARD CHARACTERISTICS

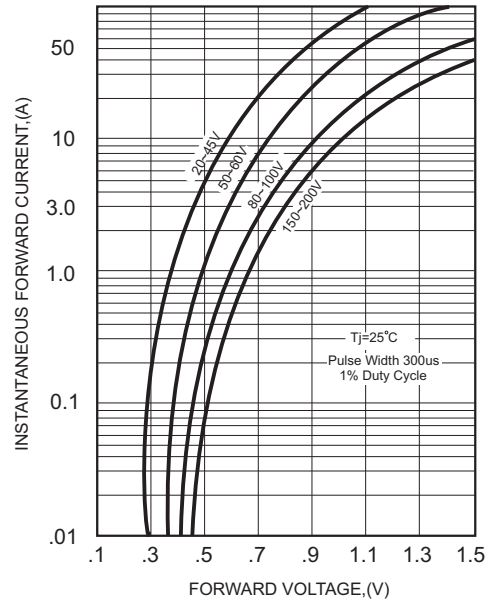


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

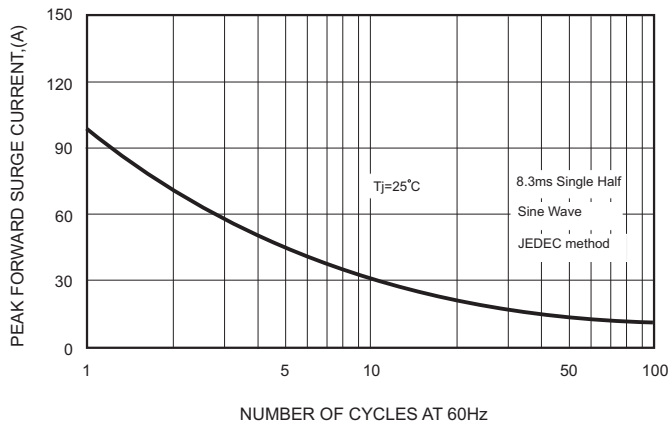


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

