

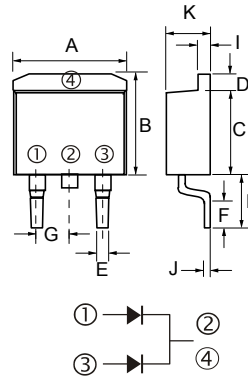
#### Features

- 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-263AB/ D<sup>2</sup>PAK

#### Mechanical Data

- Case: TO-263AB(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-263AB/ D <sup>2</sup> PAK		
DIM.	MIN.	MAX.
A	9.80	10.20
B	9.60	10.60
C	8.50	9.20
D	----	1.67
E	0.51	1.01
F	2.10	2.50
G	2.44	2.64
H	4.40	4.70
I	1.10	1.40
J	0.30	0.64
K	4.40	4.80

All Dimensions in millimeter

#### 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 2040CG	MBR 2045CG	MBR 2050CG	MBR 2060CG	MBR 2080CG	MBR 20100CG	MBR 20150CG	MBR 20200CG	Unit	
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>	20.0								A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	150								A	
Forward Voltage @I <sub>F</sub> = 10A	V <sub>FM</sub>	0.70		0.80		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>	3								°C/W	
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-55 to +150							-55 to +175		°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.

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

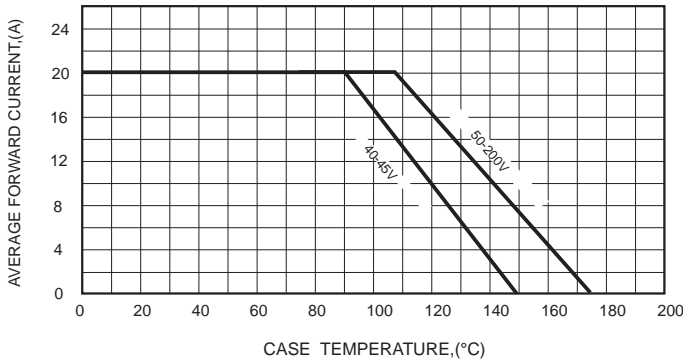


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

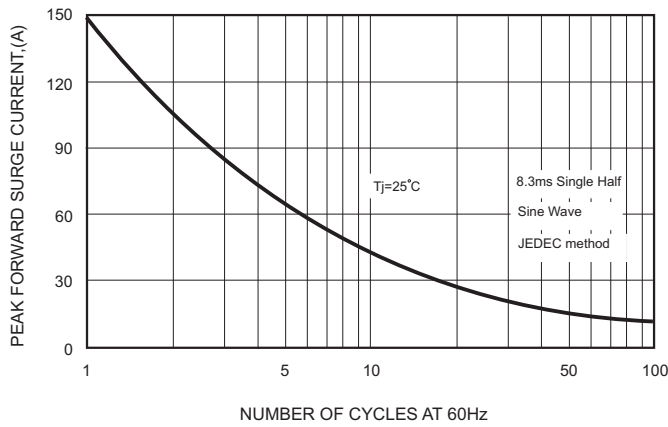


FIG.2-TYPICAL FORWARD CHARACTERISTICS

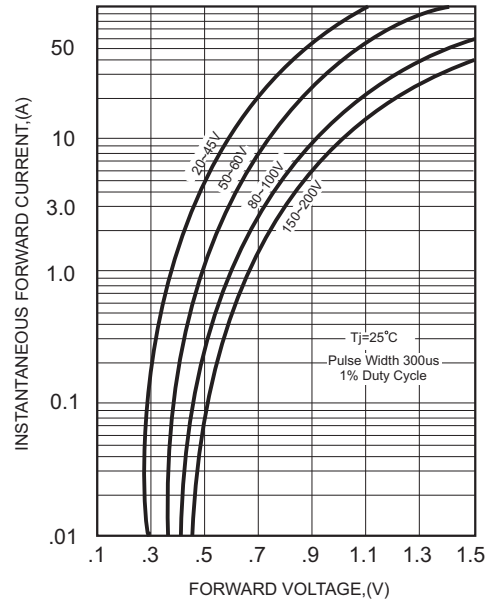


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

