Zibo Seno Electronic Engineering Co., Ltd.

淄博圣诺

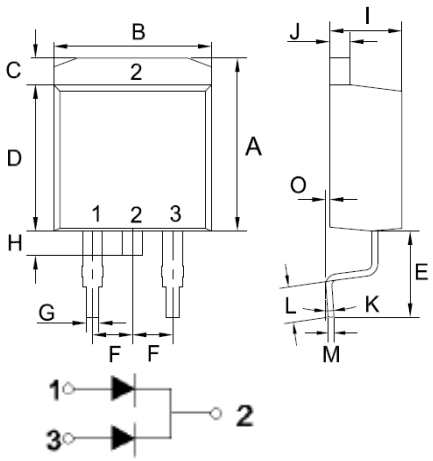
MBR1040CG-MBR10200CG

10.0A SCHOTTKY BARRIER DIODE

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-263/D^{2}PAK



TO-263 (D² 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

Mechanical Data

- Case: TO-263/D^{2}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**

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Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

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

Characteristic	Symbol	MBR 1040CG	MBR 1045CG	MBR 1050CG	MBR 1060CG	MBR 1080CG	MBR 10100CG	MBR 10150CG	MBR 10200CG	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	40	45	50	60	80	100	150	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	31	35	42	56	70	105	140	V
Average Rectified Output Current @T_L =75°C (Note 1)	I_O	10.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100				110				A
Forward Voltage @I_F = 5A	V_{FM}	0.70		0.80		0.85		0.92		V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_{RM}	0.1 20								mA
Typical Junction Capacitance (Note 2)	C_j	350		280		200				pF
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	15								°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-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.

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FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

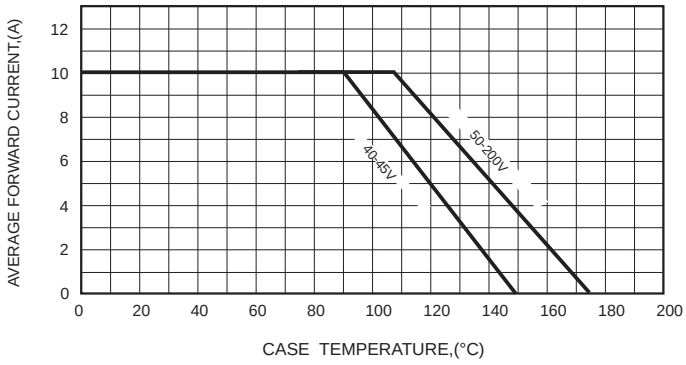
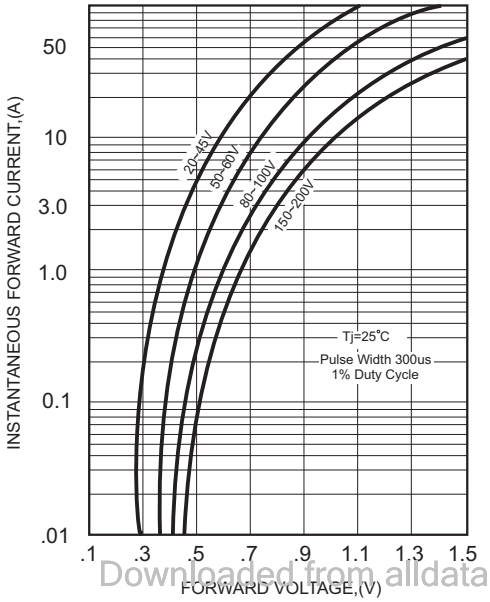


FIG.2-TYPICAL FORWARD CHARACTERISTICS



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FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

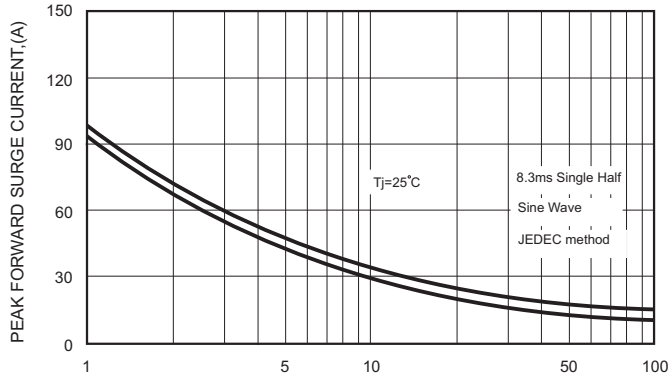
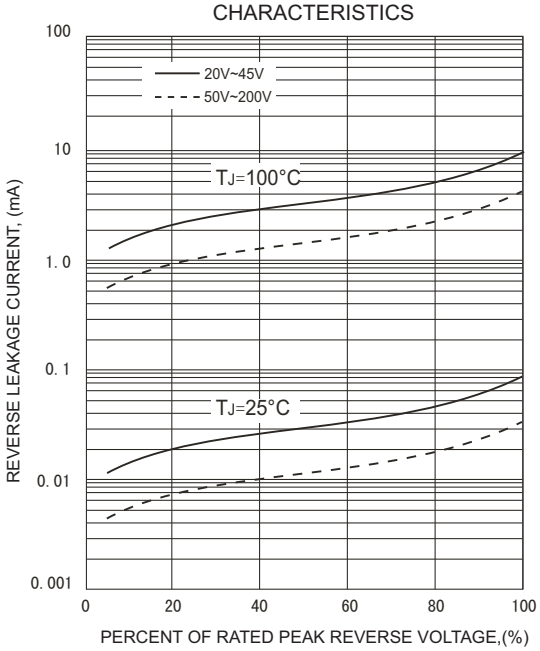


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



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