

VOLTAGE RANGE: 20 - 100V

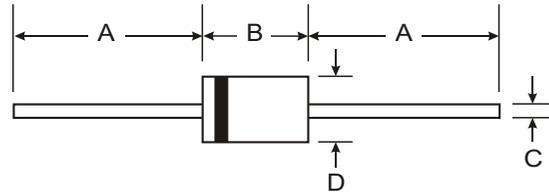
CURRENT: 1.0 A

Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications

Mechanical Data

- Case: DO-41, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.34 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



DO-41		
Dim	Min	Max
A	25.40	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	MBR120	MBR130	MBR140	MBR150	MBR160	MBR180	MBR1100	Unit	
Peak Repetitive Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	V	
Working Peak Reverse Voltage	V_{RWM}									
DC Blocking Voltage	V_R									
RMS Reverse Voltage	$V_R(\text{RMS})$	14	21	28	35	42	56	70	V	
Average Rectified Output Current @ $T_L = 100^\circ\text{C}$ (Note 1)	I_o	1.0							A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	40							A	
Forward Voltage @ $I_F = 1.0\text{A}$	V_{FM}	0.50			0.70		0.85		V	
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I_{RM}	0.5				10				mA
Typical Junction Capacitance (Note 2)	C_j	110			80				pF	
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$ $R_{\theta JA}$	15				50				$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150							$^\circ\text{C}$	

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.

RATINGS AND CHARACTERISTIC CURVES MBR120 THRU MBR1100

