Compact Technology

MBR360 thru MBR3200

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - **60** to **200** Volts
FORWARD CURRENT - **3.0** Amperes

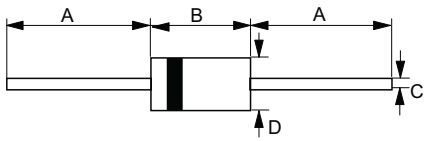
FEATURES

- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications

MECHANICAL DATA

- Case : JEDEC DO-201AD molded plastic
- Polarity : Color band denotes cathode
- Weight : 1.071grams
- Mounting position : Any

DO-201AD



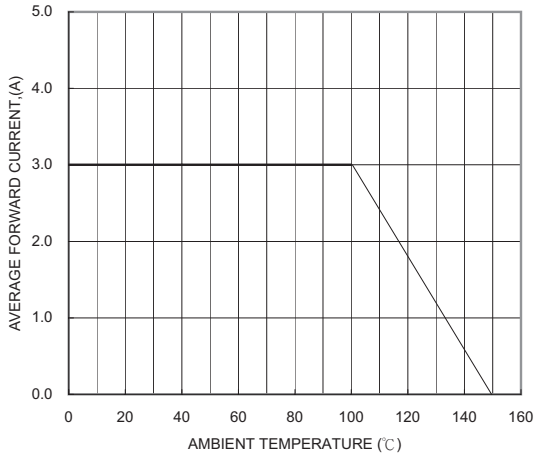
	DO-201AD	
Dim.	Min.	Max.
A	25.4	-
B	8.50	9.50
C	1.20∅	1.30∅
D	5.0 ∅	5.60∅
Dimensions in millimeters		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

PARAMETER	SYMBOL	MBR360	MBR380	MBR3100	MBR3150	MBR3200	UNIT
Maximum repetitive peak reverse voltage	VRRM	60	80	100	150	200	V
Maximum RMS voltage	VRMS	42	56	70	105	140	V
Maximum DC blocking voltage	VDC	60	80	100	150	200	V
Maximum average forward rectified current	I_F	3.0					A
Peak forward surge current, 8.3ms single half sine-wave superim posed on rated load	I_{FSM}	80.0					A
Maximum instantaneous @TA=25℃	V_F	0.7	0.85		0.87	0.9	V
Maximum DC Reverse Current @TA=25℃ at Rated DC Blocking Voltage @TA=100℃	I_R	0.2 5.0					mA
Typical Junction Capacitance	C_J	150	110		100	80	pF
Typical Thermal Resistance	$R\theta JA$ $R\theta JC$	60 15					℃/W
Operating Temperature Range	T_J	-55 to +150					℃
Storage Temperature Range	T_{STG}	-55 to +150					℃

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE



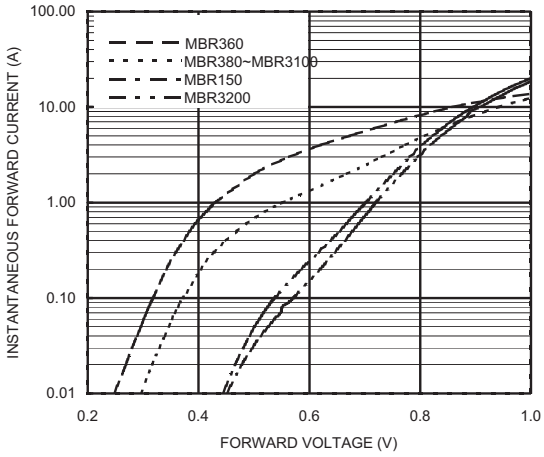


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

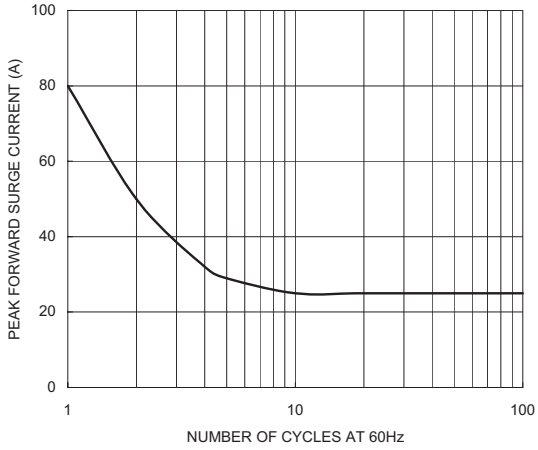


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

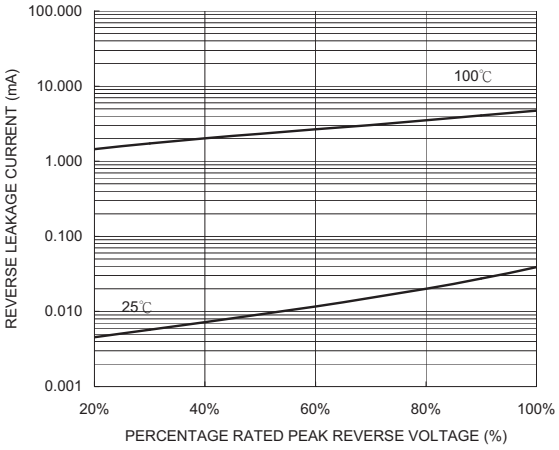


FIG. 5-TYPICAL JUNCTION CAPACITANCE