

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - **60 to 200** Volts
FORWARD CURRENT - **5.0** Amperes

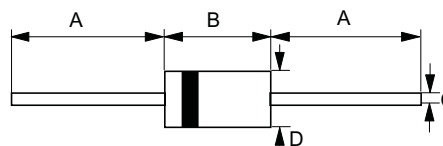
FEATURES

- 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 : 1.071 grams
- Mounting position : Any

DO-201AD



DO-201AD		
Dim.	Min.	Max.
A	25.4	-
B	8.50	9.50
C	1.20	1.30
D	5.00	5.60
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	MBR560	MBR580	MBR5100	MBR5150	MBR5200	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	5.0					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	150.0					A
Maximum instantaneous @TA=25°C	V _F	0.7	0.85	0.87	0.9		V
Maximum DC Reverse Current @TA=25°C at Rated DC Blocking Voltage @TA=100°C	I _R	0.2 5.0					mA
Typical Junction Capacitance	C _J	200	150	140	110		pF
Typical Thermal Resistance	R _{θJA} R _{θJC}	50 12					°C/W
Operating Temperature Range	T _J	-55 to +150					°C
Storage Temperature Range	T _{STG}	-55 to +150					°C

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

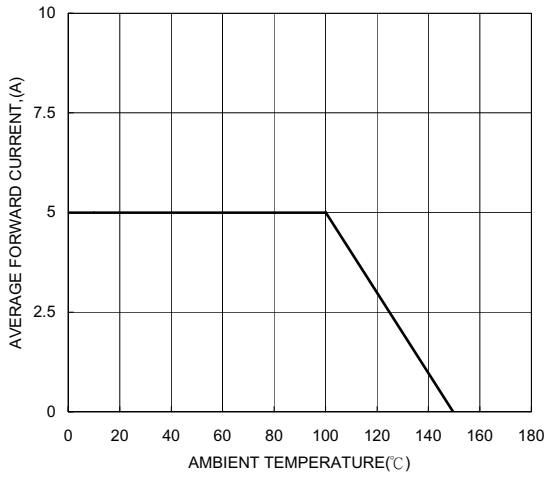


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

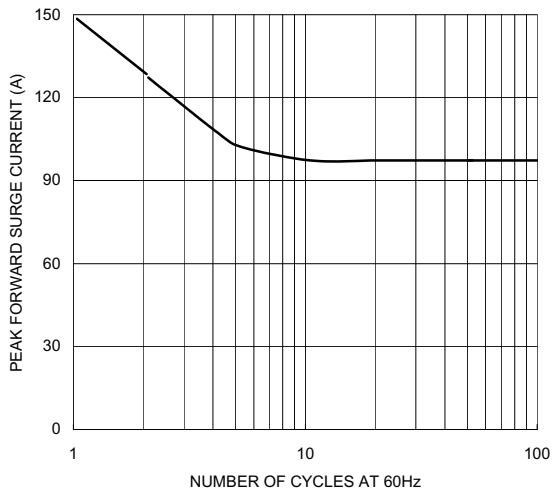


FIG. 5-TYPICAL JUNCTION CAPACITANCE

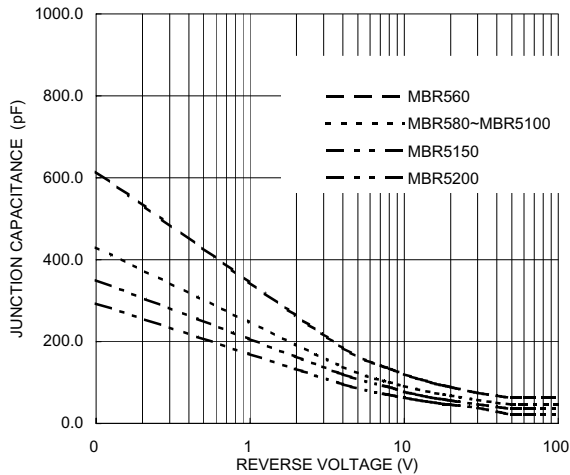


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

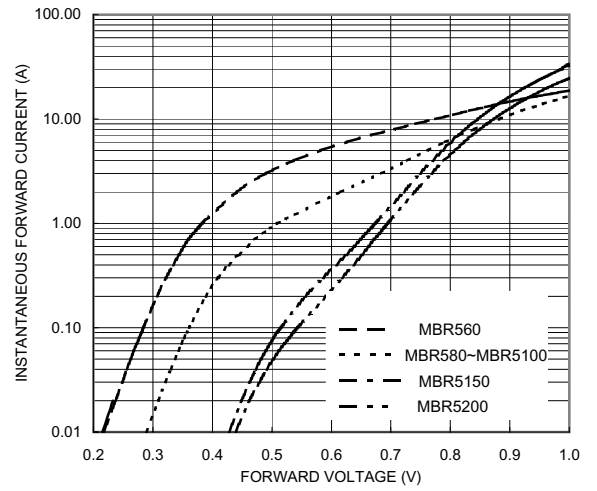


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

