

MB14~MB120

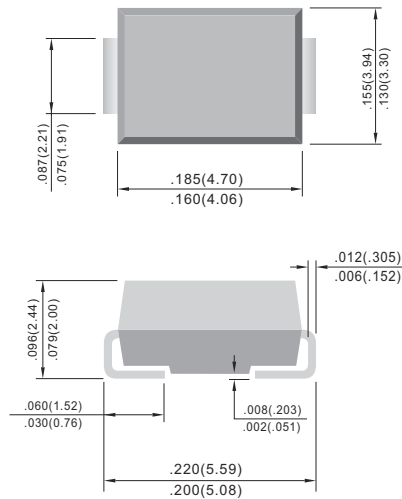
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 40 to 200 Volts **CURRENT** 1.0 Ampere



SMB/DO-214AA

Unit : inch(mm)



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications.
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: JEDEC SMB/DO-214AA molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes positive end (cathode)
- Standard packaging: 12mm tape (EIA-481)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

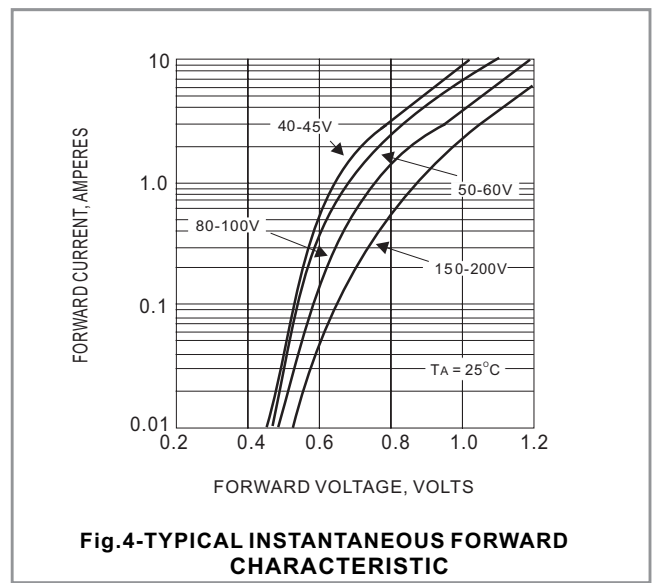
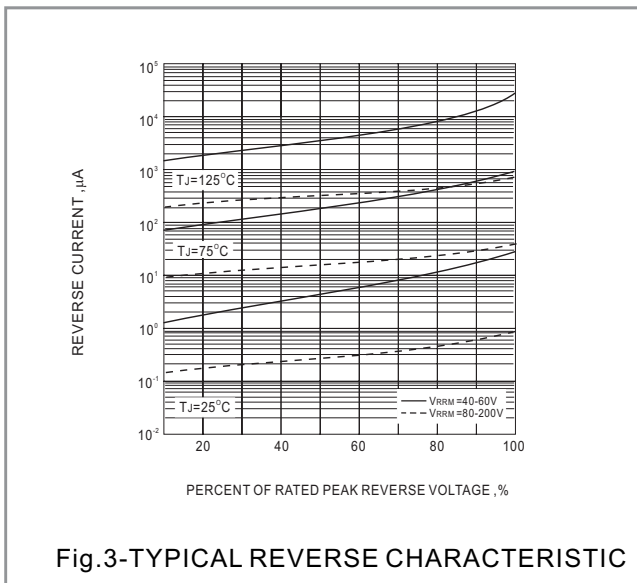
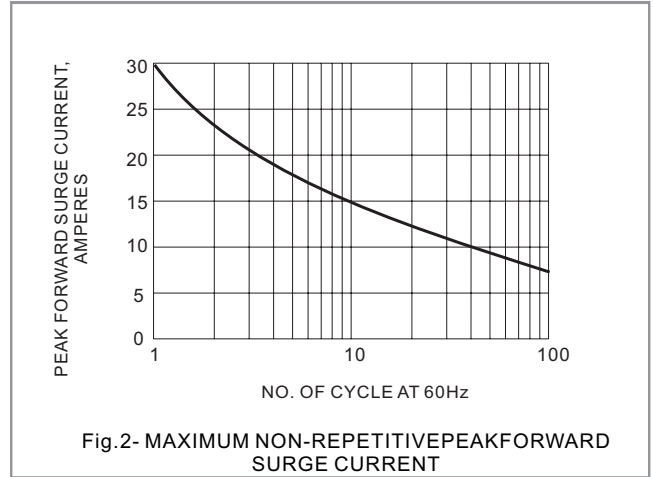
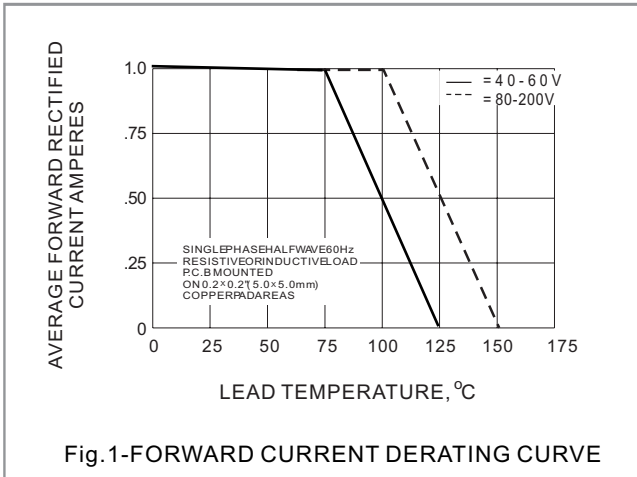
PARAMETER	SYMBOL	MB14	MB14A	MB15	MB16	MB18	MB19	MB110	MB115	MB120	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	45	50	60	80	90	100	150	200	V
Maximum RMS Voltage	V_{RMS}	28	31.5	35	42	56	63	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	45	50	60	80	90	100	150	200	V
Maximum Average Forward Current (See Figure 1)	$I_{F(AV)}$	1.0									A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	30									A
Maximum Forward Voltage at 1.0A (Note 1)	V_F	0.55		0.70		0.85		0.95			V
Maximum DC Reverse Current $T_J=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_J=100^\circ\text{C}$	I_R						0.2				mA
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$						30				$^\circ\text{C} / \text{W}$
	$R_{\theta JA}$						95				
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +125				-55 to +150				$^\circ\text{C}$	

NOTES:

- 1.Pulse Test with PW =300µsec, 1% Duty Cycle.
- 2.Mounted on P.C. Board with 5.0mm² (.013mm thick) copper pad areas.

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RATING AND CHARACTERISTIC CURVES



The cruve graph is for reference only, can't be the basis for judgment