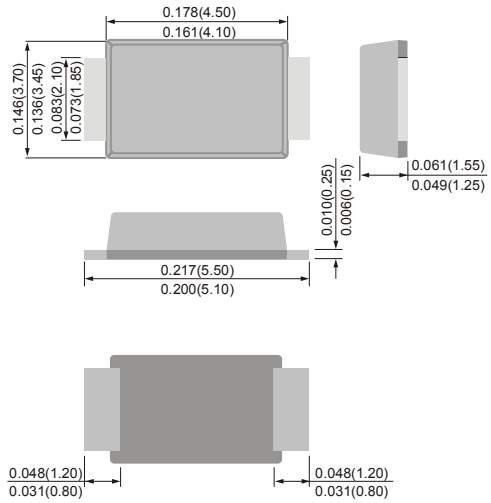
MB22F~MB220F

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20 to 200 Volts **CURRENT** 2.0 Amperes

Green

SMBF Unit : inch(mm)



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- 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
- Lead free in comply with EU RoHS 2002/95/EC directives
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MECHANICAL DATA

- Case: JEDEC SMBF 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

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load.

PARAMETER	SYMBOL	MB22F	MB24F	MB25F	MB26F	MB28F	MB29F	MB210F	MB215F	MB220F	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	50	60	80	90	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	28	35	42	56	63	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	40	50	60	80	90	100	150	200	V
Maximum Average Forward Current (See Figure 1)	$I_{F(AV)}$	2.0									A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	50									A
Maximum Forward Voltage at 2.0A (Note 1)	V_F	0.55		0.7		0.85			0.95		v
Maximum DC Reverse Current T_J=25°C at Rated DC Blocking Voltage T_J=100°C	I_R	0.2 20									mA
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	12									°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +125				-55 to +150					°C

NOTES:

1. Pulse Test with PW =300μsec, 1% Duty Cycle.
2. Mounted on P.C. Board with 8mm^2 (.013mm thick) copper pad areas.

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RATING AND CHARACTERISTIC CURVES

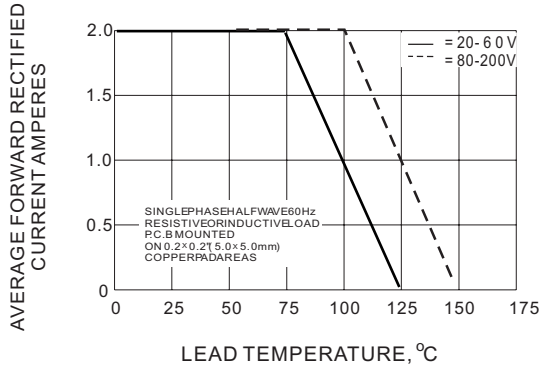

Fig.1-FORWARD CURRENT DERATING CURVE

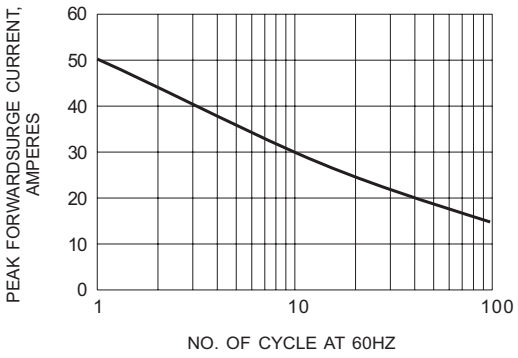

Fig.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

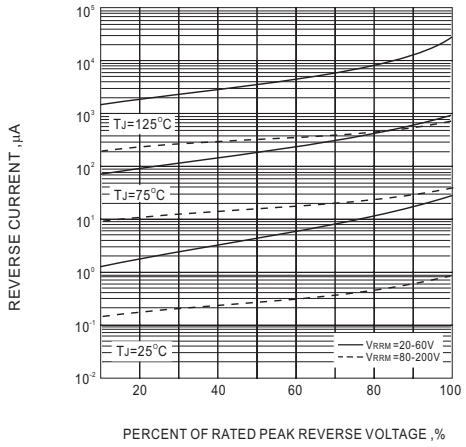

Fig.3-TYPICAL REVERSE CHARACTERISTIC

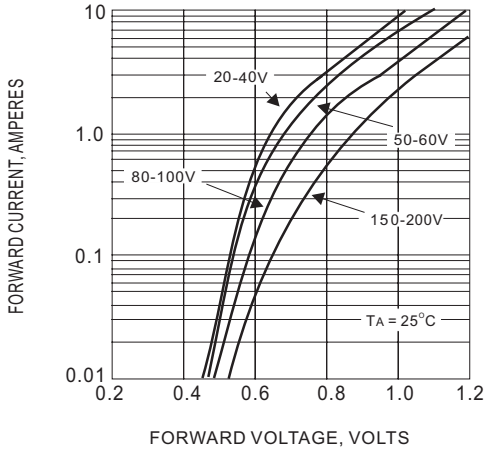

Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC