



MB28F SERIES

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

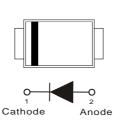
CURRENT 2 Ampere VOLTAGE 80-200 Volt

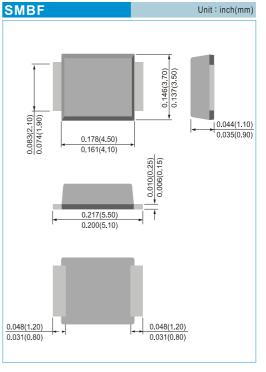
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Ultra thin profile package for space constrained utilization
- Package suitable for automated handling
- Low power loss, high efficiency
- · High surge capacity
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: plastic molded
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0018 ounces, 0.05 grams
- Polarity : Color band denotes cathode end





MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	MB28F	MB29F	MB210F	MB215F	MB220F	UNITS
Recurrent Peak Reverse Voltage	V _{RRM}	80	90	100	150	200	V
RMS Voltage	V _{rms}	56	63	70	105	140	V
DC Blocking Voltage	V _R	80	90	100	150	200	V
Average Forward Current	I _{F(AV)}	2					А
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	50					А
Forward Voltage at 2.0A	V _F	0.8 0.9				V	
DC Reverse Current at Rated T _j =25°C DC Blocking Voltage	I _R	50					μA
Typical Junction capacitance Vr=4V,1MHz	C」		90		70	50	рF
Typical Thermal Resistance ,Junction to Lead (Note 1) Junction to Ambient (Note 2)	R _{ejl} R _{eja}	30 135					°C / W
Operating Junction Temperature and Storage Temperature Range	T_,T _{stg}	-55 to +150					°C

NOTES:1.Mounted on an FR4 PCB, single-sided copper, with 100cm²copper pad area. 2.Mounted on an FR4 PCB, single-sided copper, mini pad.



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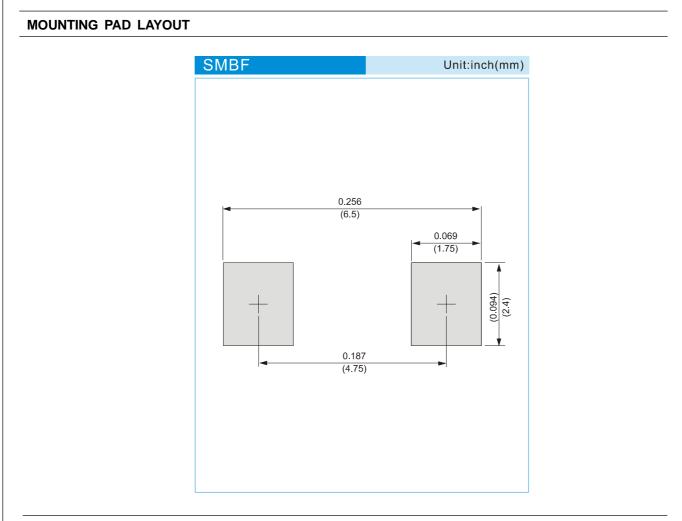
2.5 1000 F, Forward Current (A) MB28F ~ MB210F 2 C_J, Junction Capacitance(pF) 100 1.5 MB215F 1 MB220F 10 0.5 0 1 0.1 10 100 0 25 50 75 100 125 150 1 V_R, Reverse Bias Voltage (V) T_C, Case Temperature (°C) **Fig.1 Forward Current Derating Curve Fig.2 Typical Junction Capacitance** 1000 10 Reverse Current (µA) T_{.1} = 150°C MB28F ~ MB210F I_F, Forward Current (A) 100 T_{.1} = 150°C 1 10 T_{.1}= 125°C T_J = 75°C T_J = 125°C 1 0.1 T_J = 75°C 0.1 T_{.1} = 25°C T₁ = 25°C 0.01 0.01 20 40 60 80 100 0.1 0.3 0.5 0.7 0.9 1.1 V_F, Forward Voltage (V) Percent of Rated Peak Reverse Voltage (%) **Fig.4 Typical Forward Characteristics Fig.3 Typical Reverse Characteristics** 10 120 Percent of Reverse Voltage (%) MB215F ~ MB220F I_F, Forward Current (A) 100 T_J = 150°C 1 80 T_{.1} = 125°C 60 T_{.1} = 75°C 0.1 40 20 T_J = 25°C 0.01 0 0.1 0.7 0.9 0 25 50 75 100 125 150 0.3 0.5 1.1 V_F, Forward Voltage (V) T_., Junction Temperature (°C)

Fig.5 Typical Forward Characteristics

Fig.6 Operating Temperature Derating Curve



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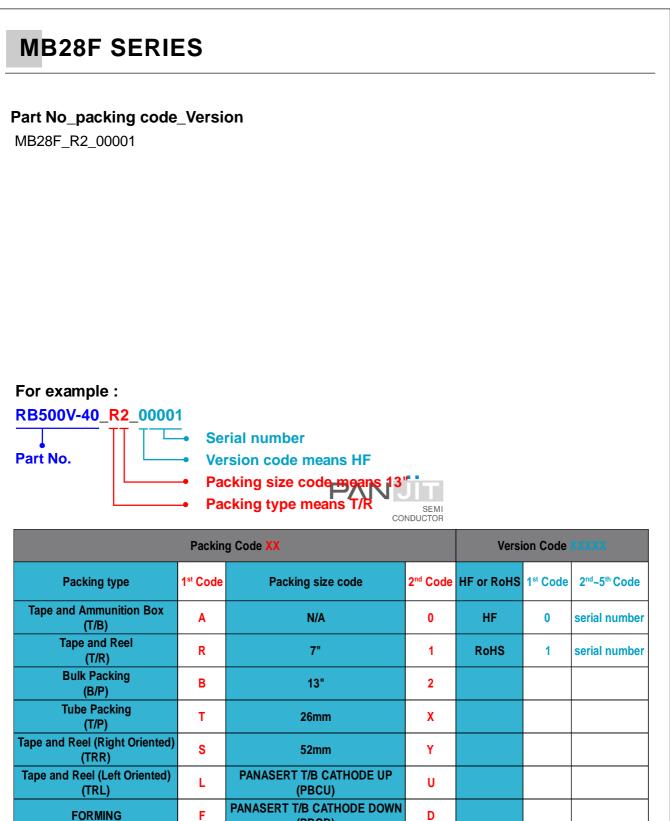


ORDER INFORMATION

Packing information

T/R - 5K per 13" plastic Reel





(PBCD)





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