PECLERS®

MB22F THRU MB210F

MINIATURE GLASS PASSIVATED SINGLE-PHASE SURFACE MOUNT BRIDGE RECTIFIER

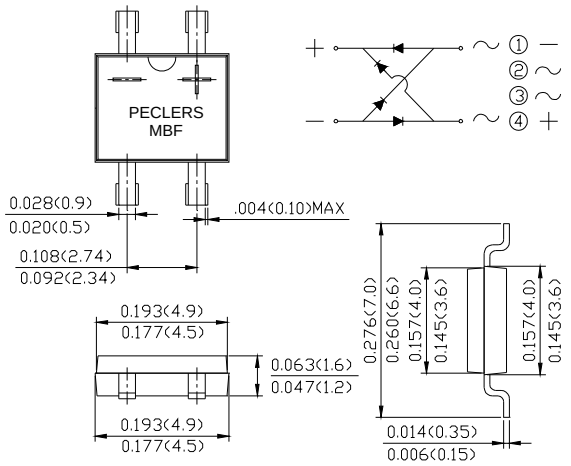
REVERSE VOLTAGE: **20 to 100 VOLTS**
FORWARD CURRENT: **2.0 AMPERE**

FEATURES

· Surge overload rating: 50 amperes peak
· Ideal for printed circuit board
· Plastic material has Underwriters Laboratory Flammability Classification 94V-0
· Low leakage
· Reliable low cost construction utilizing molded

MECHANICAL DATA

Case: Molded plastic, MBF
Epoxy: UL 94V-O rate flame retardant
Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed
Mounting position: Any
Weight: 0.008ounce, 0.18gram



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

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

	Symbols	*MB22F*	*MB24F*	*MB26F*	*MB28F*	*MB210F*	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	**Volts**
Maximum RMS Voltage	V_{RMS}	14	28	42	56	70	**Volts**
Maximum DC Blocking Voltage	V_{DC}	20	40	60	80	100	**Volts**
Maximum average forward rectified current 0.2×0.2"(5.0×5.0mm)copper pad area (see Fig. 1)	$I_{(AV)}$	2.0					**Amp**
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50					**Amp**
Maximum Forward Voltage at 2.0A (Note 1)	V_F	0.55		0.75	0.90		**Volts**
Maximum Reverse Current at T_A=25℃ at Rated DC Blocking Voltage T_A=125℃	I_R	0.5 20.0					**mAmp**
Typical Junction Capacitance (Note 2)	C_J	250			125		**pF**
Typical Thermal Resistance (Note 3)	R_{0JA} R_{0JL}	85 20					**℃/W**
Operating Junction Temperature Range	T_J	-55 ~ +125					**℃**
Storage Temperature Range	Tstg	-55 ~ +150					**℃**

NOTES:

1. Pulse test: 300μS pulse width, 1% duty cycle
2. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts
3. Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2x0.2”(5.0x5.0mm) copper pad areas.

RATINGS AND CHARACTERISTIC CURVES

Fig. 1-FORWARD CURRENT DERATING CURVE

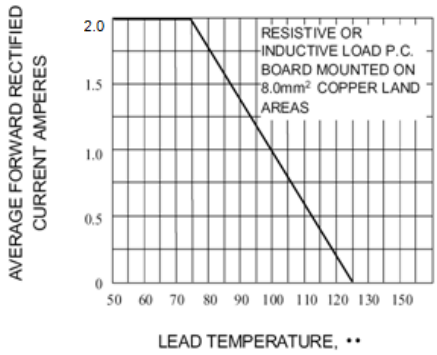


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

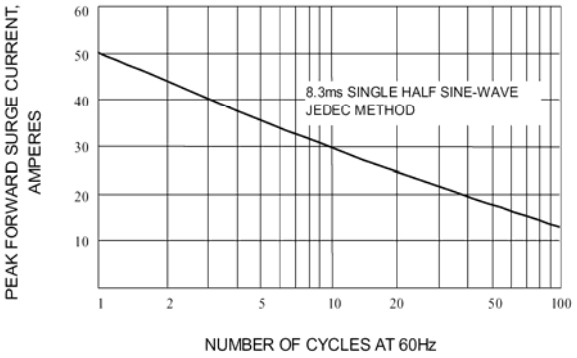


Fig. 3 - Typical Instantaneour Forward Characteristics

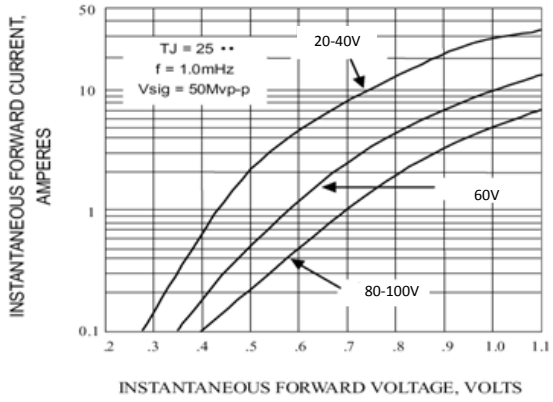


Fig. 4A - Typical Reverse Characteristics

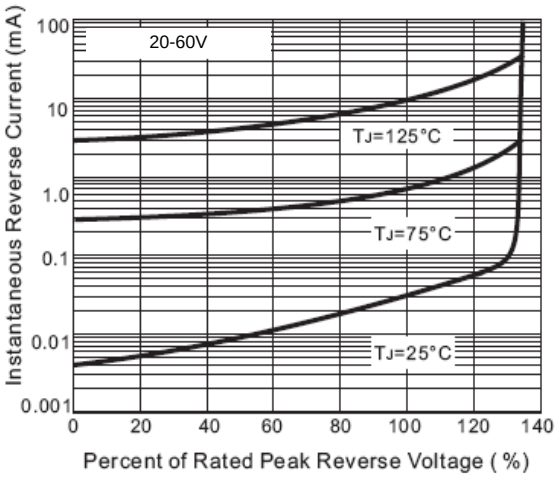


Fig. 5 - Typical Junction Capacitance

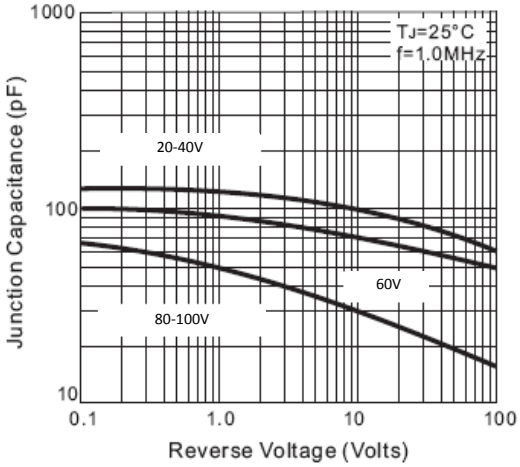


Fig. 4B - Typeical Reverse Characteristic