PECLERS®

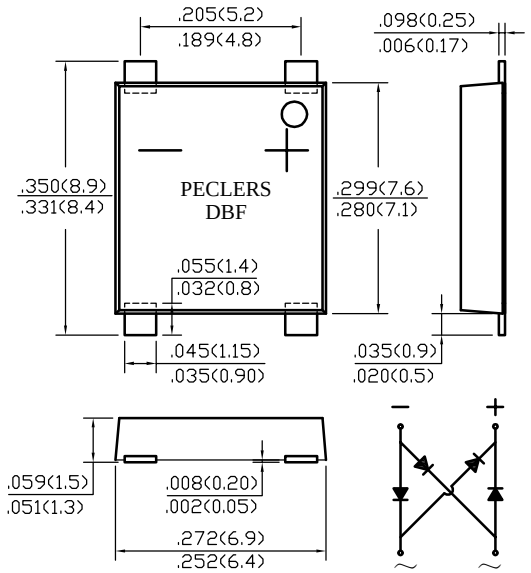
MSB40A THRU MSB40M

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

REVERSE VOLTAGE: **50 to 1000 VOLTS**

FORWARD CURRENT: **4.0 AMPERE**

DBF



Dimensions in inches and (millimeters)

FEATURE

- Glass passivated junction.
- Ideal for printed circuit board.
- Reliable low cost construction utilizing molded plastic technique.
- High surge current capability.
- High temperature soldering guaranteed: 260℃/10 seconds at terminals.

MECHANICAL DATA

- Case: Molded plastic, DBF
- Epoxy: UL 94V-O rate flame retardant
- Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed
- Mounting position: Any
- Weight: 0.204g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Type Number	SYMBOL	MSB 40A	MSB 40B	MSB 40D	MSB 40G	MSB 40J	MSB 40K	MSB 40M	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward rectified Current @ T_A=40℃	$I_{F(AV)}$	4.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	150							A
Maximum Instantaneous @I_F=2.0A DC Forward Voltage @I_F= 4.0A DC	V_F	1.0 1.1							V
Maximum DC Reverse Curren @T_J =25°C at rated DC blocking voltage @T_J =125°C	I_R	5.0 500.0							μA
Typical Junction Capacitance Per Leg (Note1)	C_J	50							pF
Typical Thermal Resistance (Note2)	R_{JA}	60							°C /W
	R_{JC}	10							
Storage Temperature	T_{STG}	-55 to +150							°C
Operating Junction Temperature	T_J	-55 to +150							°C

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

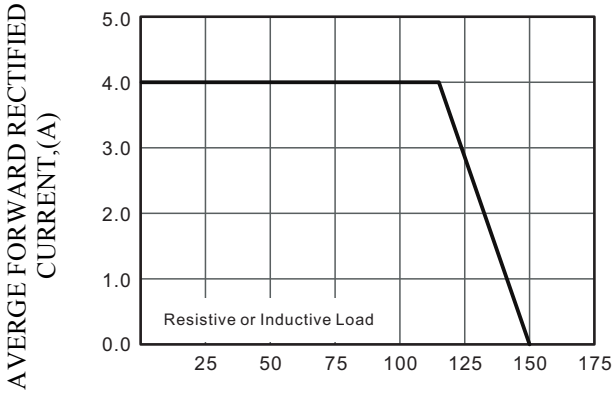


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

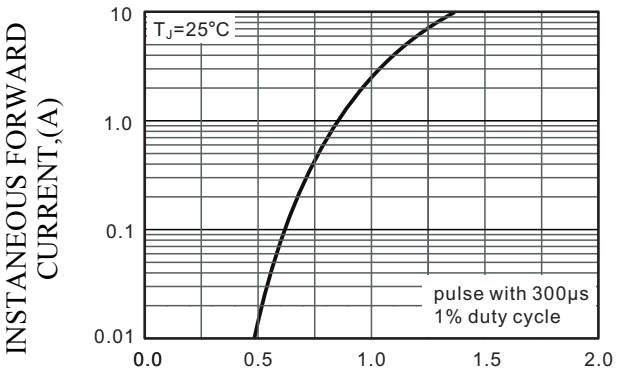


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

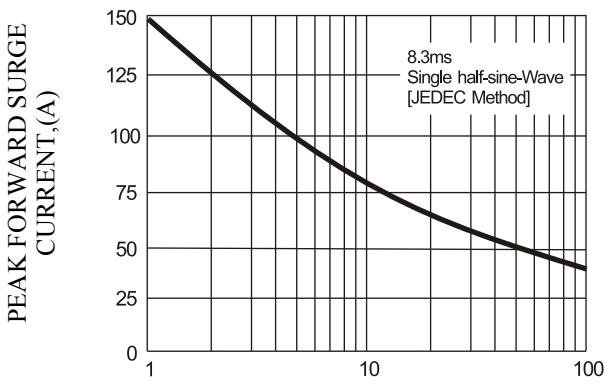


FIG.4-TYPICAL REVERSE CHARACTERISTICS

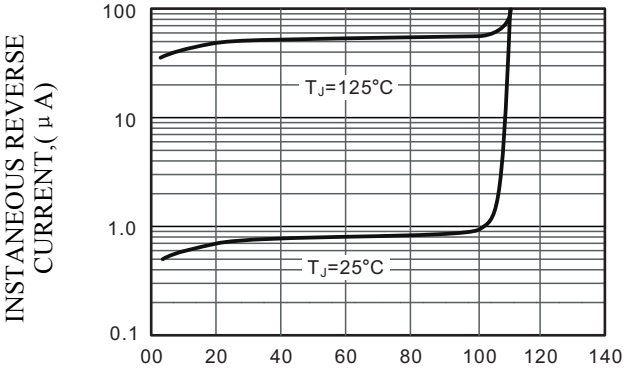


FIG.5-TYPIAL JUNCTION CAPAOTANCE