

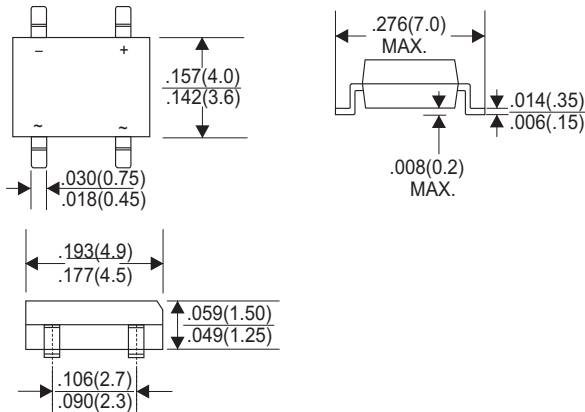


MB05F THRU MB10F

SINGLE PHASE BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

BTS



Dimensions in inches and (millimeters)

FEATURES

- * Glass Passivated Die Construction
- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	MB05F	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current (see Fig.1) (Note 2)	1.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	35							A
Maximum Forward Voltage Drop per Bridge Element at 0.5A D.C.	1.0							V
Maximum DC Reverse Current Ta=25°C	5.0							μA
at Rated DC Blocking Voltage Ta=125°C	500							μA
Typical Junction Capacitance Per Element (Note 1)	13							pF
Typical Thermal Resistance RθJA (Note 2)	70							°C/W
Operating Temperature Range, Tj	-55 — +150							°C
Storage Temperature Range, Tstg	-55 — +150							°C

NOTES: 1. Measured at 1.0MHz and reverse of 4.0V DC.

2. On aluminum substrate p.c.b. with an area of 0.8" x 0.8"(20x20mm) mounted on 0.05" x 0.05"(1.3 x 1.3mm) solder pad

RATING AND CHARACTERISTIC CURVES (MB05F THRU MB10F)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

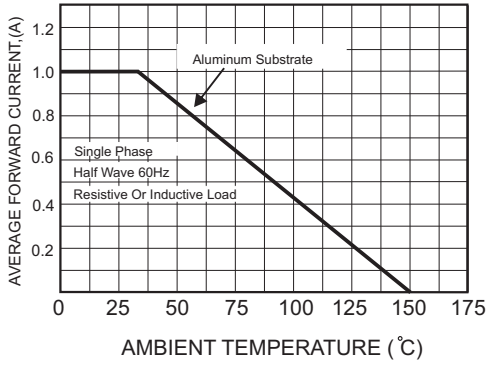


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

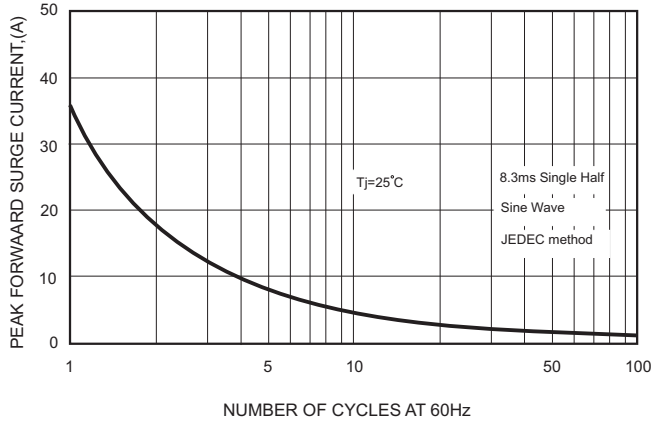


FIG.3-TYPICAL FORWARD CHARACTERISTICS

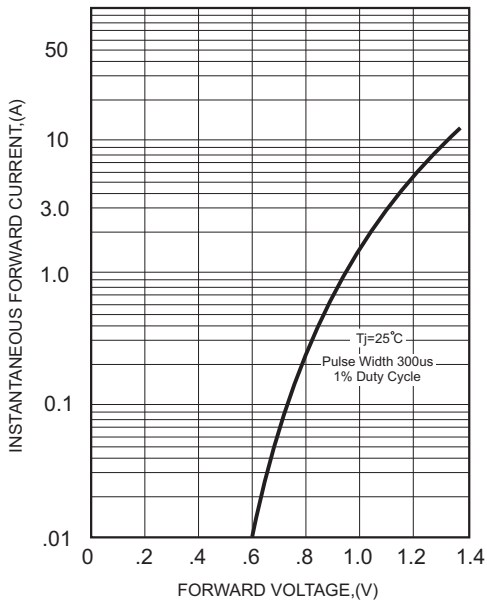


FIG.4-TYPICAL REVERSE CHARACTERISTICS

