



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**B05AF
THRU
B05MF**

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SURFACE MOUNT BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 0.5 Ampere

FEATURES

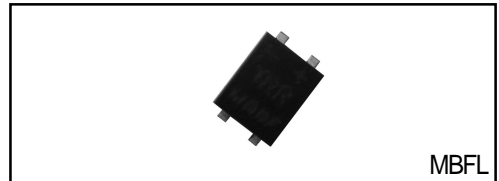
- * Ideal for automated placement
- * Low profile space
- * Low forward voltage drop
- * Low leakage current
- * High forward surge capability
- * Glass passivated junction

MECHANICAL DATA

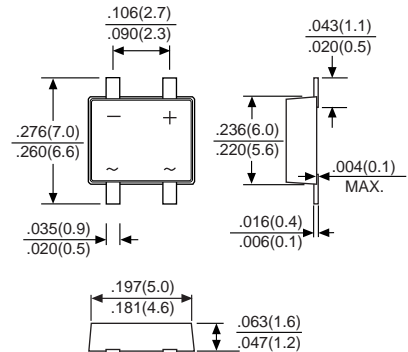
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any
- * Weight: 0.12 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



MBFL



Dimensions in inches and (millimeters)

	SYMBOL	B05AF	B05BF	B05DF	B05GF	B05JF	B05KF	B05MF	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	Vdc	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Output Current at TA = 30°C (Note 2)	Io	0.5							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	25							Amps
Maximum DC Forward Voltage Drop per Bridge Element at 0.5A DC	VF	1.1							Volts
Maximum Reverse Current at rated	IR	5.0							μAmps
DC Blocking Voltage per element		100							
Typical Junction Capacitance (Note1)	CJ	15							pF
Typical Thermal Resistance (Note 2)	RθJA	85							°C/W
Operating and Storage Temperature Range	TJ,TSTG	-50 to + 150							°C

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
2. On glass epoxy P.C.B. with 0.05 x 0.05" (1.3x1.3mm) copper pads.

RATING AND CHARACTERISTIC CURVES (B05AF THRU B05MF)

FIG. 1 - DERATING CURVE FOR OUTPUT CURRENT

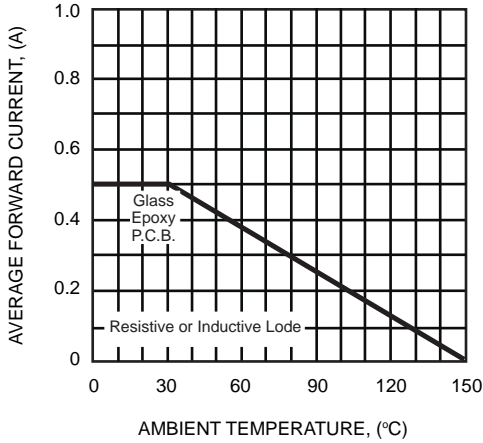


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

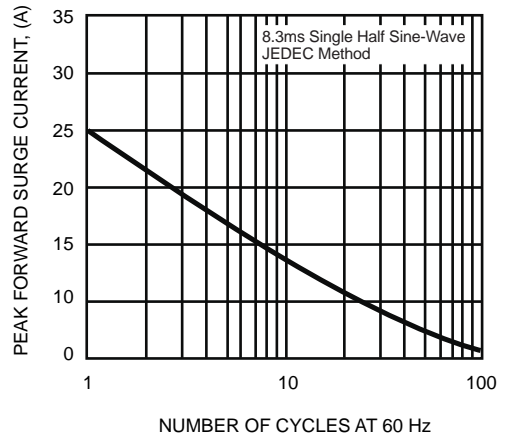


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

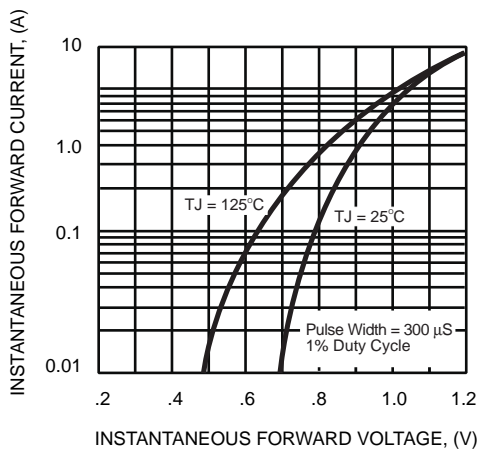
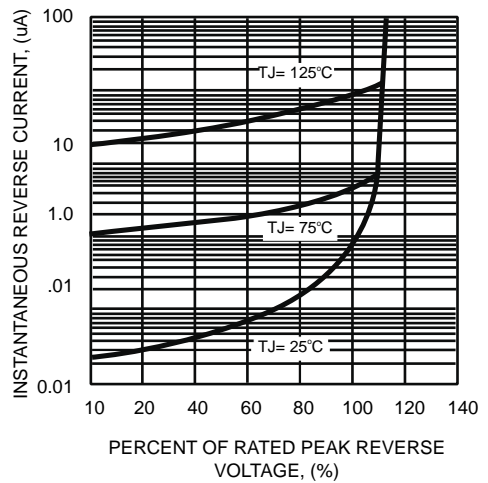


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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