

MB1S - MB6S

PRV : 100 - 600 Volts

Io : 0.5 Ampere

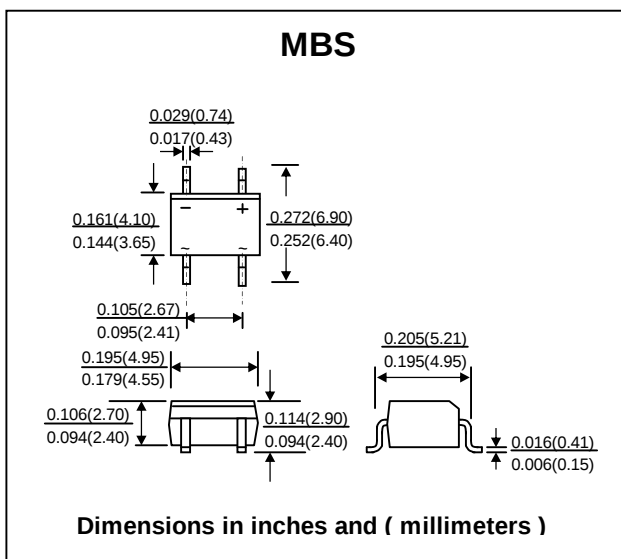
FEATURES :

- * Glass passivated chip junctions.
- * High surge overload rating : 35A peak
- * Saves space on printed circuit boards.
- * High temperature soldering guaranteed : 260 °C/10 seconds.
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Terminals : Plated Lead solderable per MIL-STD-750, Method 2026
- * Polarity : Polarity symbols marked on body
- * Mounting position : Any
- * Weight : 0.22 gram

MINI-BRIDGE RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
60 Hz, resistive or inductive load.

RATING	SYMBOL	MB1S	MB2S	MB4S	MB6S	UNIT
Maximum Repetitive Reverse Voltage	V _{RRM}	100	200	400	600	V
Maximum RMS Voltage	V _{RMS}	70	140	280	420	V
Maximum DC Blocking Voltage	V _{DC}	100	200	400	600	V
Maximum Average Forward Output Rectified Current (See Fig.1)	I _{F(AV)}	0.5 ⁽¹⁾ (on glass-epoxy P.C.B.) 0.8 ⁽²⁾ (on alimium substrate)				A
Maximum Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	35				A
Rating for fusing (t < 8.3 ms.)	I ² t	5.0				A ² S
Maximum Instantaneous Forward Voltage per element at I _F = 0.4 A	V _F	1.0				V
Maximum DC Reverse Current Ta = 25°C at Rated DC Blocking Voltage Ta = 125°C	I _R	5.0				μA
	I _{R(H)}	100				μA
Typical Junction Capacitance per element	C _j	13 ⁽³⁾				pF
Typical Thermal Resistance	RθJA	85 ⁽¹⁾				°C/W
Junction and Storage Temperature Range	T _J , T _{STG}	-55 to + 150				°C

Notes : (1) On glass epoxy P.C Board mounted on 0.5" x 0.5" (13mm x 13mm) Pads.

(2) On aluminum substrate P.C.B. with an area 0.8" x 0.8" (20mm x 20mm) mounted on 0.5" x 0.5" (13mm x 13mm) Pads.

(3) Measured at 1.0 MHz and applied reverse voltage of 4.0VDC

RATING AND CHARACTERISTIC CURVES (MB1S - MB6S)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

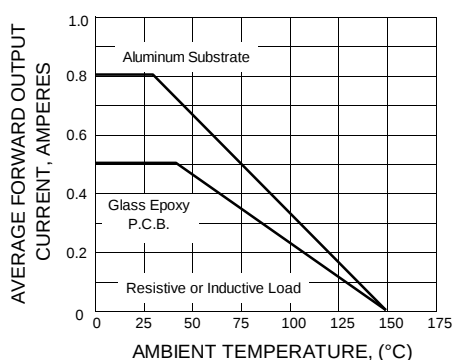


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER BRIDGE ELEMENT

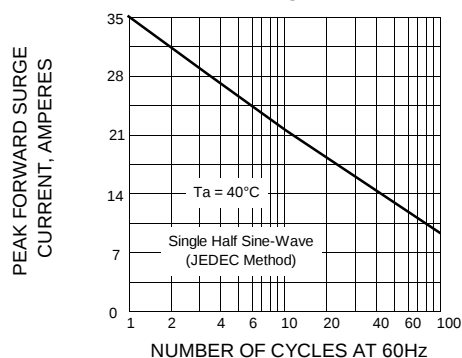


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

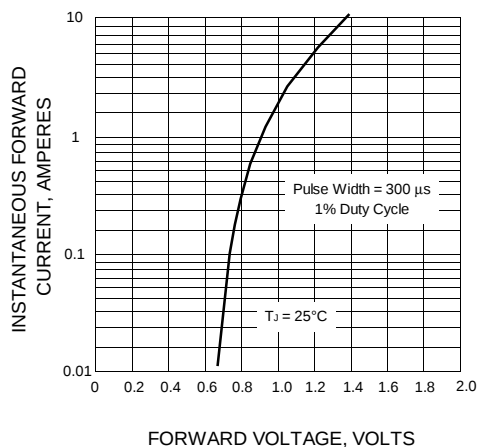


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

