

# B1S - B10S

**PRV : 100 - 1000 Volts**

**I<sub>o</sub> : 0.5 Ampere**

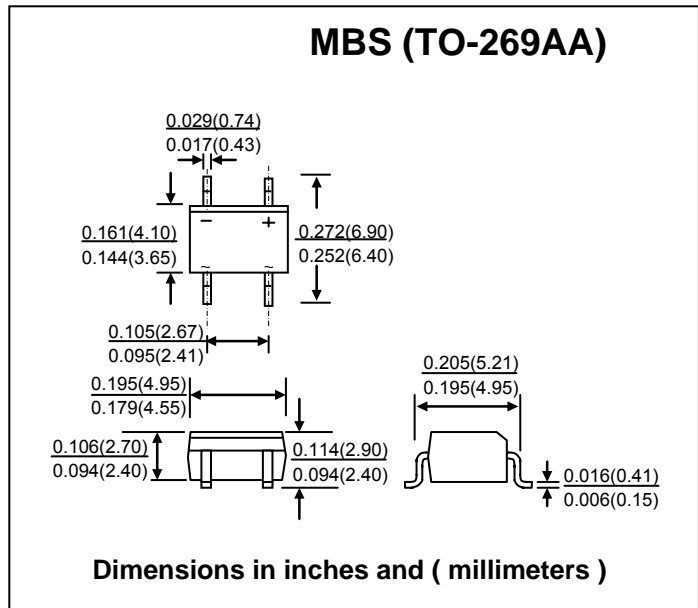
## FEATURES :

- \* 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

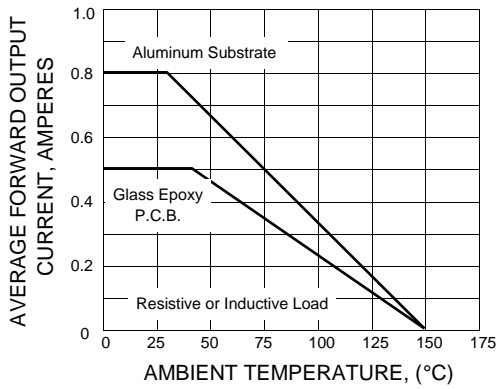
RATING	SYMBOL	B1S	B2S	B4S	B6S	B8S	B10S	UNIT
Maximum Repetitive Reverse Voltage	V <sub>RRM</sub>	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	100	200	400	600	800	1000	V
Maximum Average Forward Output Rectified Current (See Fig.1)	I <sub>F(AV)</sub>	0.5 <sup>(1)</sup> (on glass-epoxy P.C.B.) 0.8 <sup>(2)</sup> (on aliminum substrate)						A
Maximum Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	35						A
Rating for fusing (t < 8.3 ms.)	I <sup>2</sup> t	5.0						A <sup>2</sup> S
Maximum Instantaneous Forward Voltage per element at I <sub>F</sub> = 0.4 A	V <sub>F</sub>	1.0						V
Maximum DC Reverse Current at Rated DC Blocking Voltage	Ta = 25°C I <sub>R</sub>	5.0						µA
	Ta = 125°C I <sub>R(H)</sub>	100						µA
Typical Junction Capacitance per element	C <sub>j</sub>	13 <sup>(3)</sup>						pF
Typical Thermal Resistance	R <sub>θJA</sub>	85 <sup>(1)</sup>						°C/W
Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150						°C

### Notes :

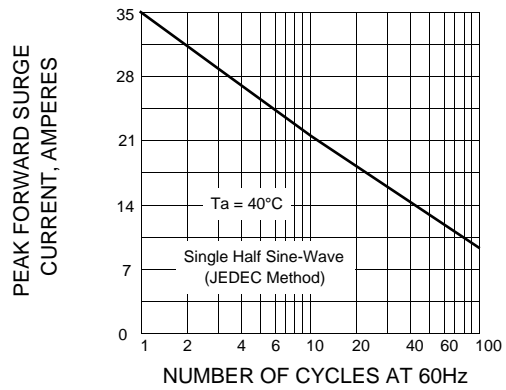
- (1) On glass epoxy P.C Board mounted on 0.5" x 0.5" (13mm x 13mm) Pads.
- (2) On aluminum substrate P.C.B. with an area 0.8" x 0.8" (20mm x 20mm) mounted on 0.5" x 0.5" (13mm x 13mm) Pads.
- (3) Measured at 1.0 MHz and applied reverse voltage of 4.0VDC

## RATING AND CHARACTERISTIC CURVES ( B1S - B10S )

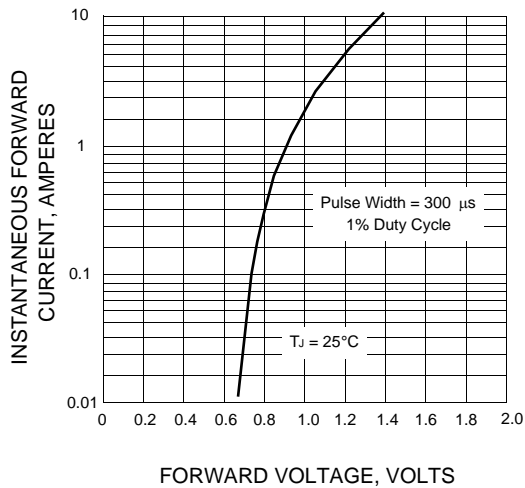
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**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**

