

# S1ZB20 - S1ZB80

**PRV : 200 - 800 Volts**

**I<sub>o</sub> : 0.8 Amperes**

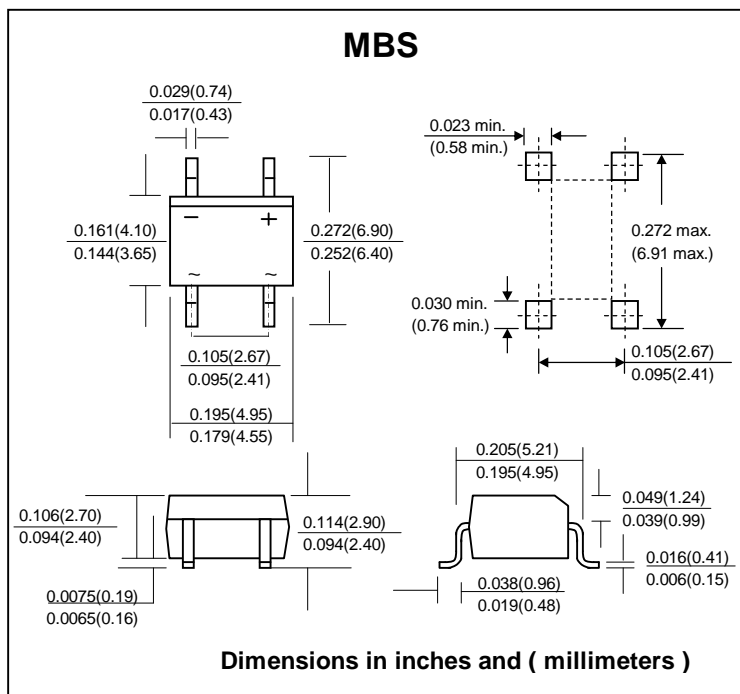
### FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Ideal for printed circuit board
- \* **Pb / RoHS Free**

### MECHANICAL DATA :

- \* Case : Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Terminals : Plated Lead solderable per MIL-STD-202, Method 208
- \* Polarity : Polarity symbols marked on body
- \* Mounting position : Any
- \* Weight : 0.22 gram

## MINI-BRIDGE RECTIFIERS



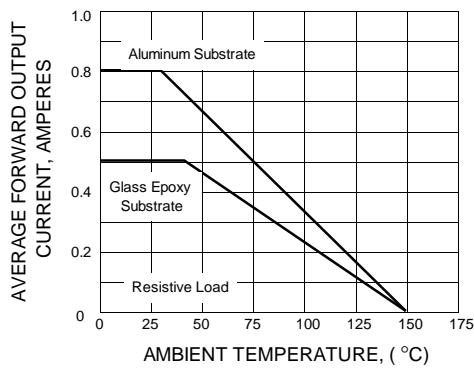
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

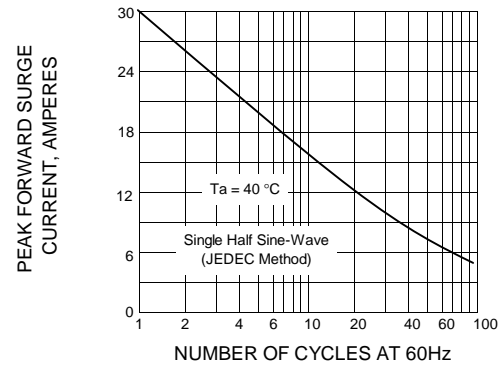
RATING	SYMBOL	S1ZB20	S1ZB60	S1ZB80	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	200	600	800	V
Maximum RMS Voltage	V <sub>RMS</sub>	140	420	560	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	200	600	800	V
Maximum Average Forward Current	I <sub>F(AV)</sub>	0.5 (on glass-epoxy substrate)			A
		0.8 (on aluminum substrate)			
Maximum Peak Forward Surge Current, Non-Repititive 1 Cycle Peak Value	I <sub>FSM</sub>	30			A
Current Squared Time at 1ms ≤ t < 10 ms.	I <sup>2</sup> t	4.5			A <sup>2</sup> S
Maximum Forward Voltage per Diode at I <sub>F</sub> = 0.4 A	V <sub>F</sub>	1.05			V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	10			μA
Maximum Thermal Resistance, Junction to Lead	R <sub>θJL</sub>	20			°C/W
Operating Junction Temperature Range	T <sub>J</sub>	- 40 to + 150			°C
Storage Temperature Range	T <sub>STG</sub>	- 40 to + 150			°C

## RATING AND CHARACTERISTIC CURVES ( S1ZB20 - S1ZB80 )

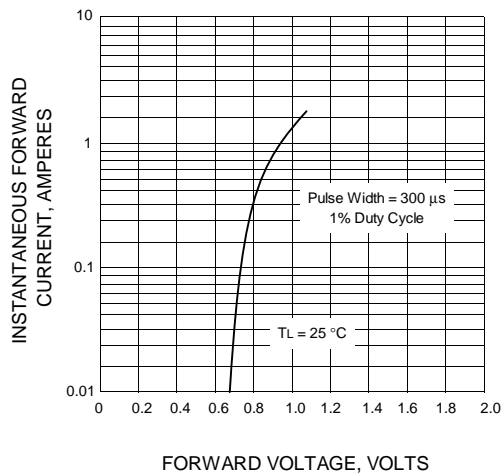
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**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**

