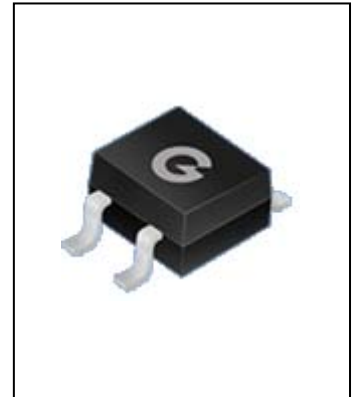


**SILICON BRIDGE RECTIFIERS****MB05S--MB10S****FEATURES**

- Glass: passivated chip junctions
- High surge overload rating: 30A peak
- Saves space on printed circuit boards
- This series is UL recognized under Component Index, file number E239431
- Plastic material has U/L flammability classification 94V-0
- High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs. (2.3kg) tension

**MECHANICAL DATA**

- Case: Molded plastic body over passivated junctions
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026

**Maximum Ratings** (@T<sub>A</sub> = 25°C unless otherwise specified)

Characteristic	Symbol	MB05S	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	UNITS
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum average forward Output current @T <sub>A</sub> =25°C	I <sub>F(AV)</sub>	0.5 <sup>1)</sup> 0.8 <sup>2)</sup>						A	
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I <sub>FSM</sub>	30						A	

**Thermal Characteristics**

Characteristic	Symbol	MB05S	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	UNITS
Typical junction capacitance per leg (NOTE 3)	C <sub>J</sub>	13						pF	
Current squared time t < 8.3ms, T <sub>a</sub> = 25°C	I <sup>2</sup> t	3.74						A <sup>2</sup> s	
Typical thermal resistance per leg (NOTE 1) (NOTE 2)	R <sub>θJA</sub> R <sub>θJL</sub>	85 20						°C/W	
Operating junction temperature range	T <sub>J</sub>	- 55 ---- + 150						°C	
Storage temperature range	T <sub>STG</sub>	- 55 ---- + 150						°C	

**Electrical Characteristics** (@T<sub>A</sub> = 25°C unless otherwise specified)

Characteristic	Symbol	MB05S	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	UNITS
Maximum instantaneous forward voltage at 0.4 A	V <sub>F</sub>	1.0						V	
Maximum reverse current @T <sub>A</sub> =25°C at rated DC blocking voltage @T <sub>A</sub> =125°C	I <sub>R</sub>	5.0 100						μA	

NOTES: (1) On glass epoxy P.C.B. mounted on 0.05 x 0.05" (1.3 x 1.3mm) pads

(2) On aluminum substrate P.C.B. with an area of 0.8" x 0.8" (20 x 20mm) mounted on 0.05 x 0.05" (1.3 x 1.3mm) solder pad

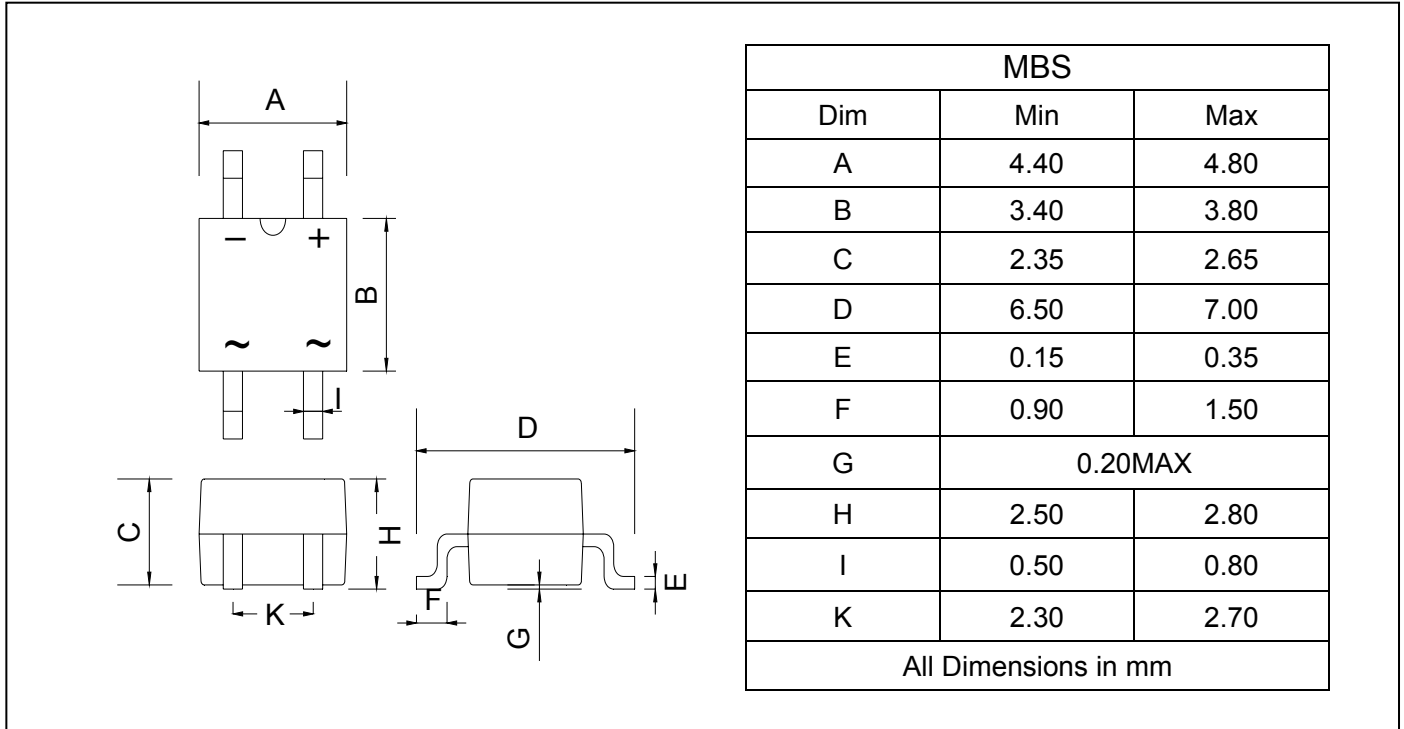
(3) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts



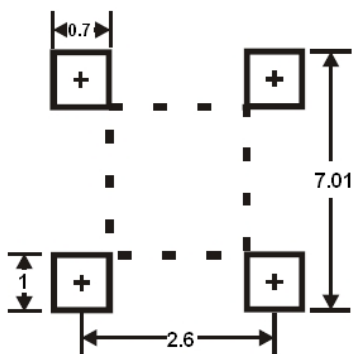
**SILICON BRIDGE RECTIFIERS**

**MB05S--MB10S**

**PACKAGE OUTLINE DIMENSIONS**



**SOLDERING FOOTPRINT**



Unit : mm

**PACKAGE INFORMATION**

Device	Package	Shipping
MB05S--MB10S	MBS	3000/Tape&Reel



# SILICON BRIDGE RECTIFIERS

# MB05S--MB10S

