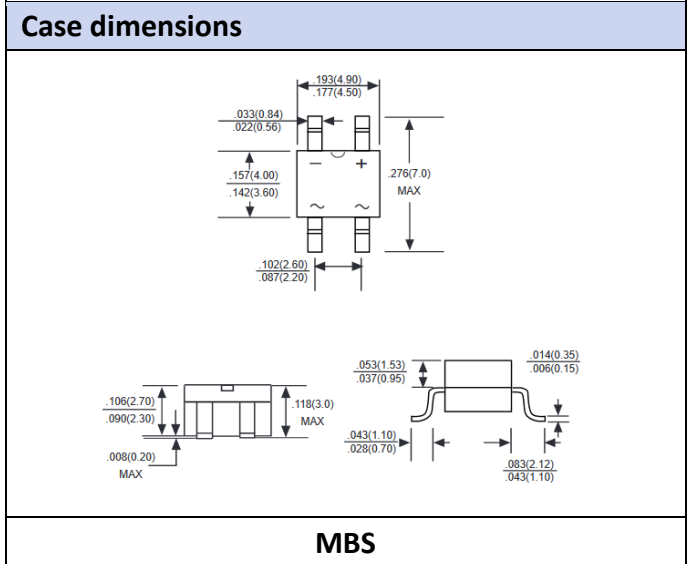


SMD Single Phase Bridge Rectifiers

Primary characteristics		
Parameter	Value	Unit
Maximum Repetitive Peak Reverse Voltage	200 ~ 1000	V
Maximum Average Forward Rectified Current	0.5 ~ 0.8	A

Features

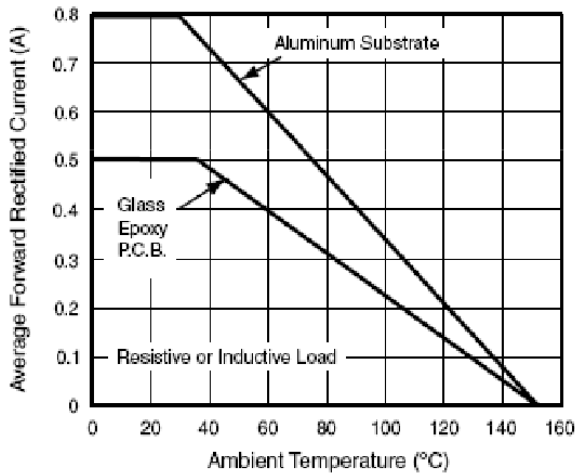
- **MBS** case for easy automatic insertion
- Pb-free and **RoHS** compliant
- High temperature soldering guaranteed: 260°C/10s
- High surge current capability
- Terminals: plated leads solderable per MIL-STD-750, Method 2026
- Weight: 0.078oz, 0.22g



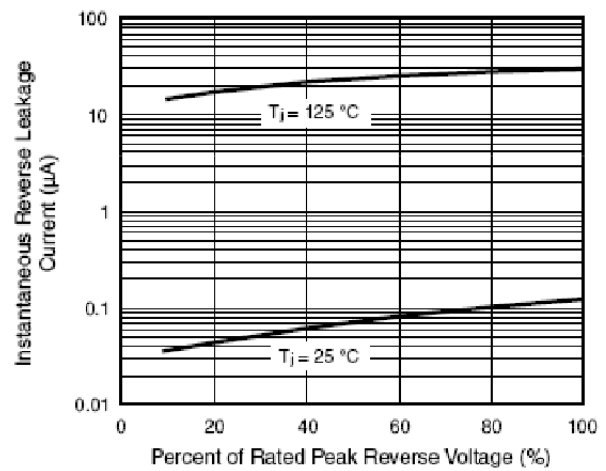
Absolute maximum ratings and general electrical characteristics (T _a = 25°C)							
Parameter	Symbol	Value					Unit
		MB2S	MB4S	MB6S	MB8S	MB10S	
Maximum repetitive peak reverse voltage	V _{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	140	280	420	560	700	
Maximum DC blocking voltage	V _{DC}	200	400	600	800	1000	
Maximum average forward rectified current @T _A =30°C	Glass-epoxy PCB ¹⁾	0.5					A
	Aluminum substr. ²⁾	0.8					
Peak forward surge current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I _{FSM}	35					A ² sec
Rating for fusig (t<8.3ms)	I ² t	5.0					
Maximum instantaneous forward voltage per leg @0.4A	V _F	1.0					
Maximum DC reverse current at rated DC blocking voltage	T _a =25°C	5.0					μA
	T _a =125°C	100					
Typical junction capacitance per leg ³⁾	C _J	13					pF
Typical thermal resistance per leg	R _{θJA}	85 ¹⁾					°C/W
	R _{θJA}	70 ²⁾					
	R _{θJL}	20 ¹⁾					
Operating junction and storage temperature range	T _j , T _{STG}	-55 ~ 150					°C

1) On glass epoxy PCB mounted on 0.05x0.05" (1.3x1.3mm) pads
 2) On aluminum substrate PCB with an area of 0.8"x0.8" (20x20mm) mounted on 0.05x0.05" (1.3x1.3mm) solder pad
 3) At 4.0V, 1.0MHz

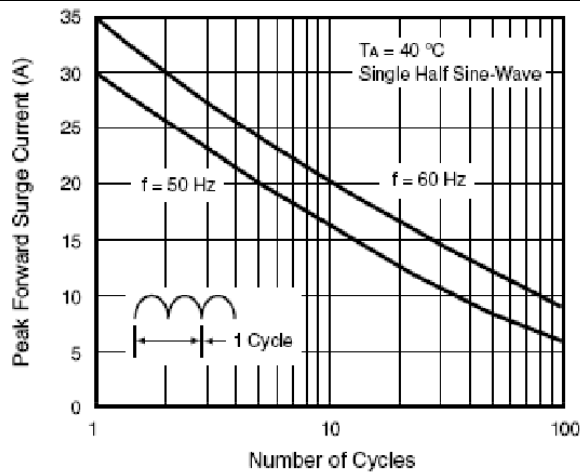
Derating curve output rectified current



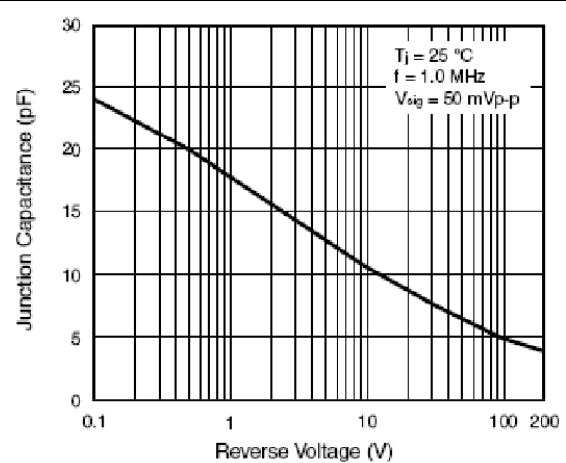
Typical reverse leakage characteristics per leg



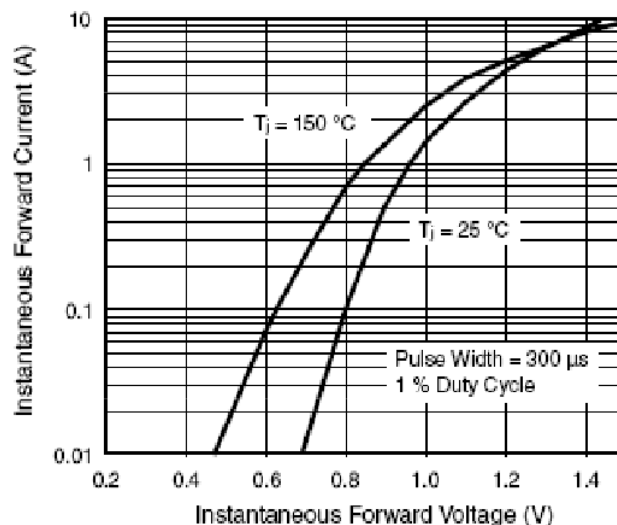
Maximum non-repetitive peak forward surge current per leg

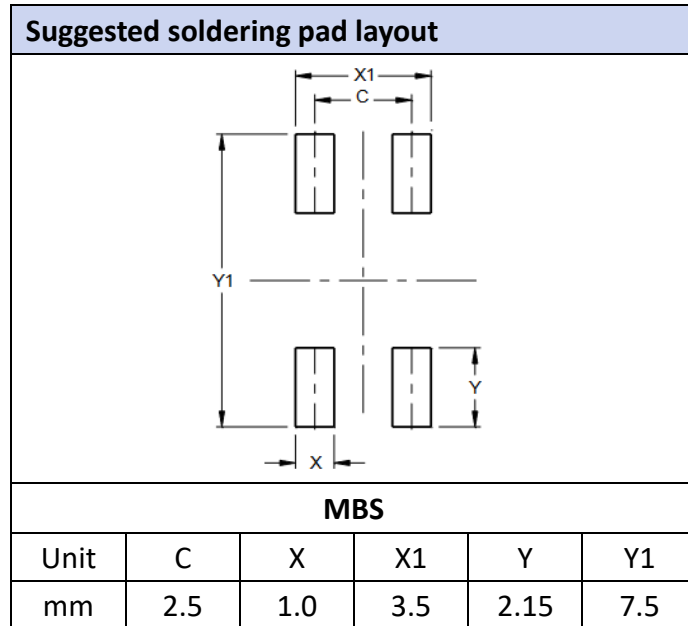


Typical junction capacitance per leg



Typical forward voltage characteristics per leg





Ordering information			
Part Number	Package	Shipping Quantity	Dimensions
MB2S ~ MB10S	MBS	3 000 pcs / reel 36 000 pcs / box	--- 40 x 37 x 27 cm

Disclaimer

Akyga semi reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Akyga semi or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on Akyga semi data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Akyga semi does not assume any liability arising out of the application or use of any product or circuit. Akyga semi products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Akyga semi. Customers using or selling Akyga semi components for use in such applications do so at their own risk and shall agree to fully indemnify Akyga semi and its subsidiaries harmless against all claims, damages and expenditures.