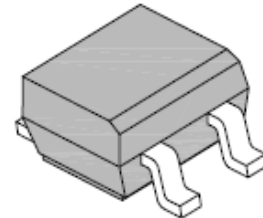


## 0.5A Surface Mount Bridge Rectifier

### Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability
- Designed for Surface Mount Application
- Plastic Material – UL Flammability 94V-0
- RoHS Compliant



MBS



### Mechanical Data

<b>Case:</b>	MBS, molded plastic
<b>Terminals:</b>	Plated leads solderable per MIL-STD-202, method 208
<b>Polarity:</b>	As marked on case
<b>Mounting Position:</b>	Any
<b>Weight:</b>	0.22 grams

### Maximum Ratings And Electrical Characteristics (T<sub>amb</sub>=25°C)

Symbol	Description	MB2S	MB4S	MB6S	MB8S	Unit	Conditions
<b>VRRM</b>	Max. Repetitive Peak Reverse Voltage	200	400	600	800	V	
<b>VRMS</b>	Max. RMS Voltage	140	280	420	560	V	
<b>VDC</b>	Max. DC Blocking Voltage	200	400	600	800	V	
<b>IF(AV)</b>	Average Rectified Output Current	0.5				A	TA=40°C, Note 1
		0.8				A	TA=40°C, Note 2
<b>IFSM</b>	Non-Repetitive Peak Forward Surge Current	30				A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
<b>VF</b>	Forward Voltage per leg	1.0				V	IF=0.5A

# 0.5A Surface Mount Bridge Rectifier

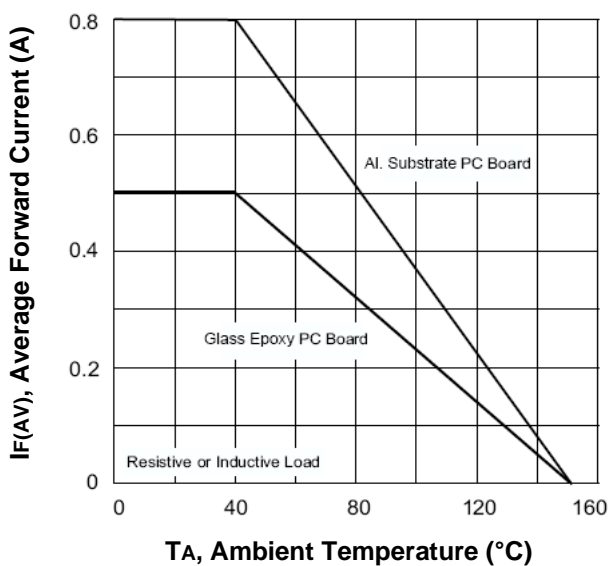
## MB2S – MB8S

Symbol	Description	MB2S	MB4S	MB6S	MB8S	Unit	Conditions
<b>I<sub>R</sub></b>	Max. Reverse DC Current At Rated DC Blocking Voltage per leg	5.0				μA	T <sub>A</sub> =25°C
		500				μA	T <sub>A</sub> =125°C
<b>I<sub>t</sub></b>	Rating for Fusing (t<8.3ms)	3.73				A <sup>2</sup> s	
<b>C<sub>J</sub></b>	Typical junction capacitance per leg	25				pF	V <sub>R</sub> = 4V, f=1MHz
<b>R<sub>thJA</sub></b>	Typical Thermal Resistance per leg	85				°C / W	Note 1
<b>R<sub>thJL</sub></b>		20					
<b>T<sub>J</sub>,T<sub>STG</sub></b>	Operating Junction and Storage Temperature Range	-55 to +150				°C	

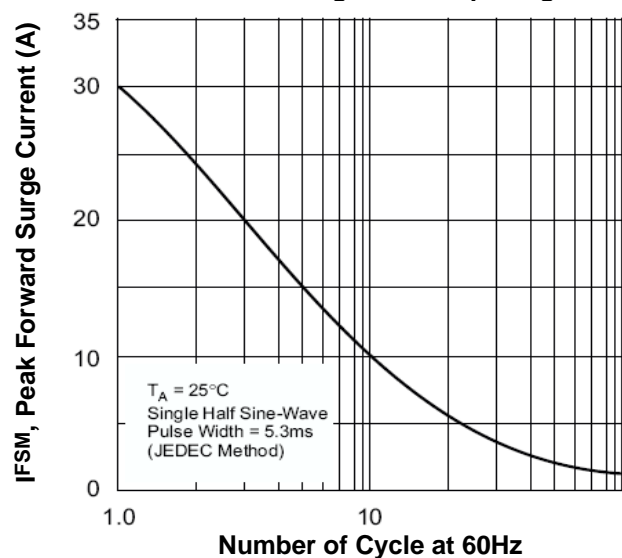
- Note:** 1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.  
 2. Mounted on aluminum substrate PC board with 1.3mm<sup>2</sup> solder pad.

### Typical Characteristics Curves

**Fig.1- Output Current Derating Curve**



**Fig.2-Max. Non-repetitive Peak Forward Surge Current per leg**



# 0.5A Surface Mount Bridge Rectifier

## MB2S – MB8S

Fig.3-Typical Instantaneous Forward Characteristic per leg

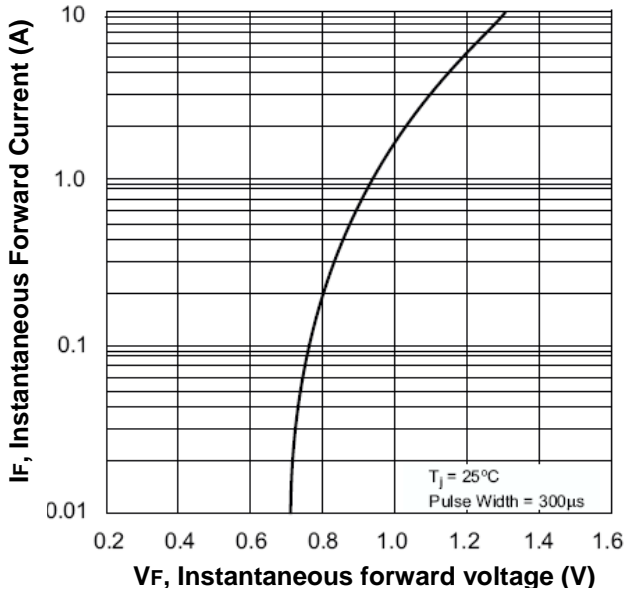


Fig.4-Typical Reverse Characteristics per leg

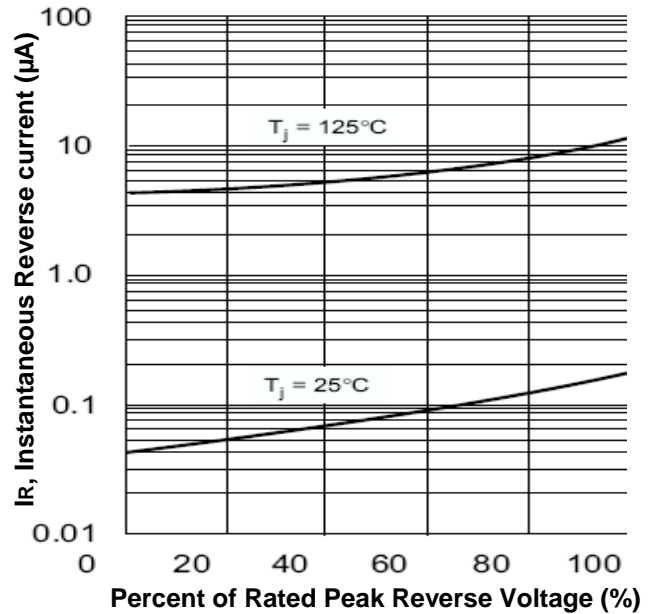
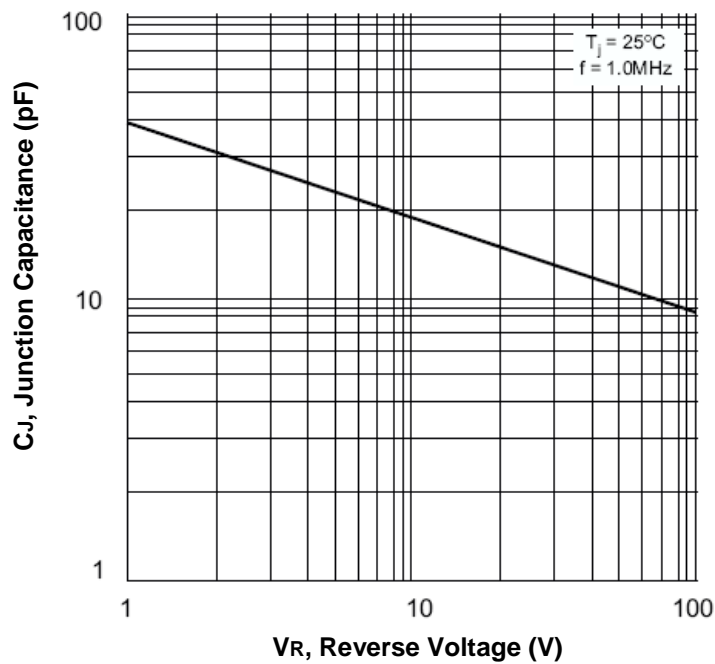


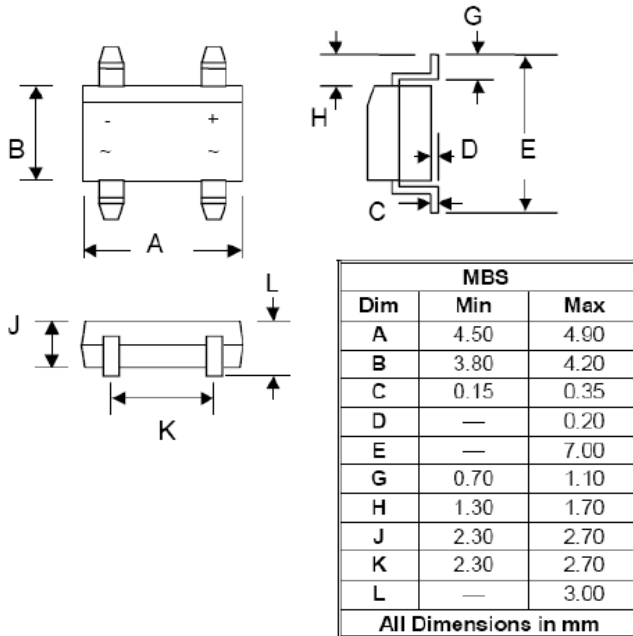
Fig.5-Typical Junction Capacitance



# 0.5A Surface Mount Bridge Rectifier

## MB2S – MB8S

### Dimensions in mm



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