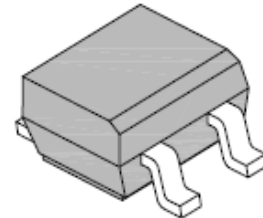


0.5A Surface Mount Bridge Rectifier

Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability
- Designed for Surface Mount Application
- High Temperature Soldering Guaranteed: 260°C/10 seconds at 5lbs.(2.3kg) tension
- RoHS Compliant



MBS



Mechanical Data

Case:	MBS, molded plastic
Epoxy:	Plastic package has UL flammability classification 94V-0
Terminals:	Plated leads solderable per MIL-STD-202, method 208
Polarity:	As marked on case
Mounting Position:	Any
Weight:	0.22 grams

Maximum Ratings And Electrical Characteristics (T_{amb}=25°C)

Symbol	Description	MB2S	MB4S	MB6S	MB8S	Unit	Conditions
	Marking Code	MB2S	MB4S	MB6S	MB8S		
V_{RRM}	Max. Repetitive Peak Reverse Voltage	200	400	600	800	V	
V_{RMS}	Max. RMS Voltage	140	280	420	560	V	
V_{DC}	Max. DC Blocking Voltage	200	400	600	800	V	
I_{F(AV)}	Average Rectified Output Current	0.5				A	Note 1
		0.8				A	Note 2
I_{FSM}	Non-Repetitive Peak Forward Surge Current	35				A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)

0.5A Surface Mount Bridge Rectifier

MB2S – MB8S

Symbol	Description	MB2S	MB4S	MB6S	MB8S	Unit	Conditions
I_{t}^2	Rating for Fusing ($t < 8.3\text{ms}$)	5.0				A^2s	
V_F	Forward Voltage per leg	1.0				V	$I_F = 0.4\text{A}$
I_R	Max. Reverse DC Current At Rated DC Blocking Voltage per leg	5.0				μA	$T_A = 25^\circ\text{C}$
		100				μA	$T_A = 125^\circ\text{C}$
C_J	Typical Junction Capacitance per leg	13				pF	$V_R = 4\text{V}$, $f = 1\text{MHz}$
R_{thJA}	Typical Thermal Resistance per leg	85				$^\circ\text{C} / \text{W}$	Note 1
		70					Note 2
R_{thJL}		20					Note 1
T_J, T_{STG}	Operating Junction and Storage Temperature Range	-55 to +150				$^\circ\text{C}$	

Note: 1. On glass epoxy P.C.B. mounted on 0.05x0.05" (1.3x1.3mm) pads.

2. On aluminum substrate P.C.B. with an area of 0.8x0.8" (20x20mm) mounted on 0.05x0.05" (1.3x1.3mm) solder pad.

Typical Characteristics Curves

Fig.1- Output Rectified Current Derating Curve

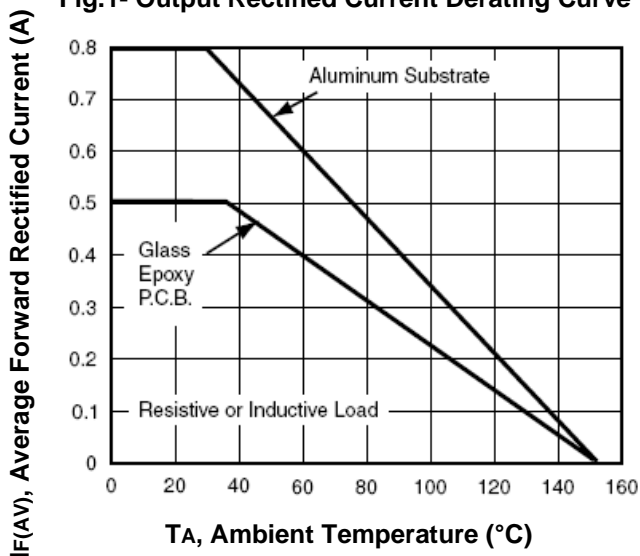
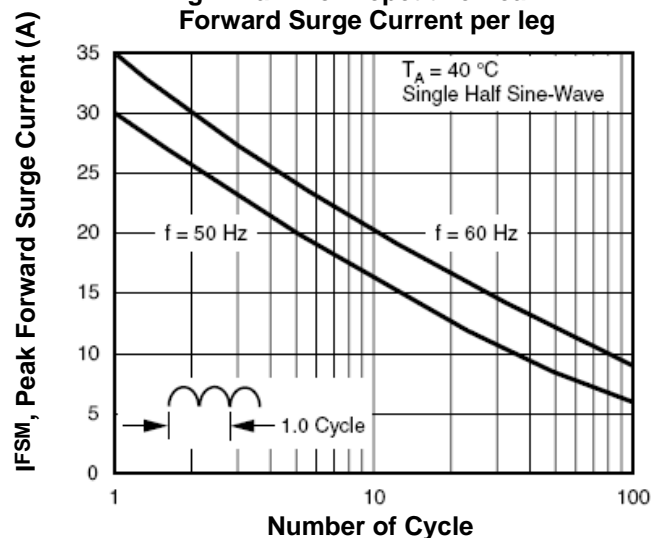


Fig.2-Max. Non-repetitive Peak Forward Surge Current per leg



0.5A Surface Mount Bridge Rectifier

MB2S – MB8S

Fig.3-Typical Instantaneous Forward Characteristic per leg

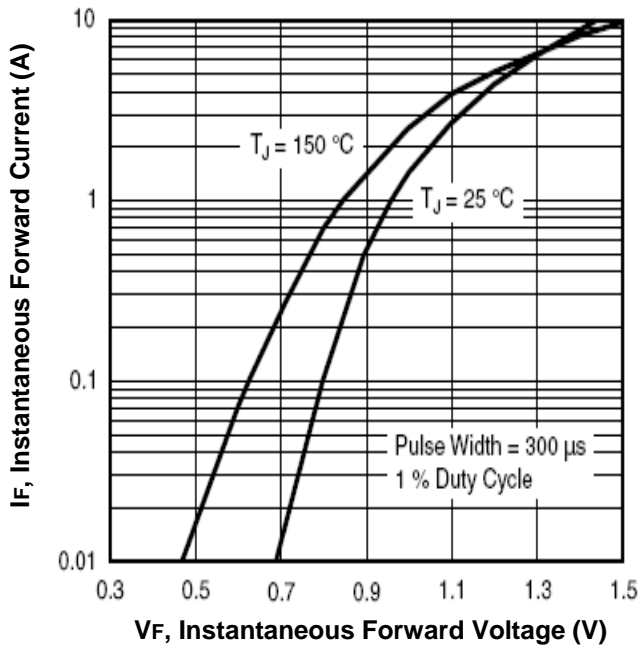


Fig.4-Typical Reverse Characteristics per leg

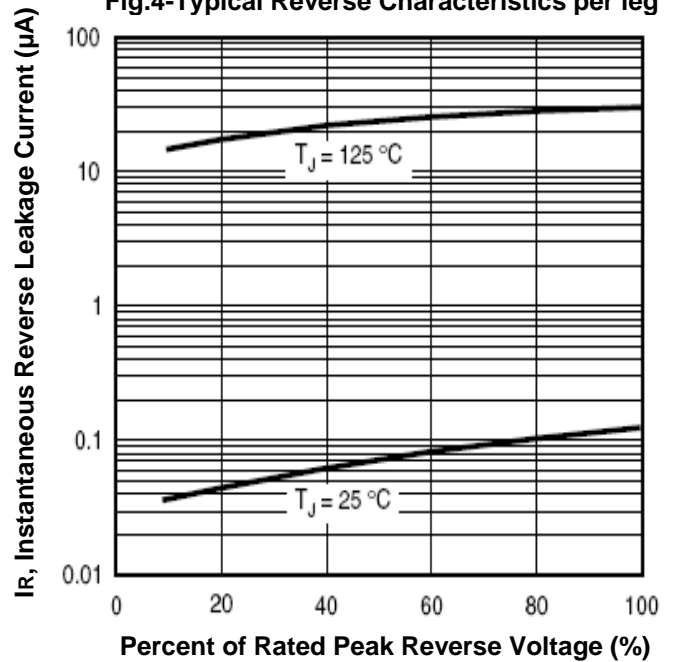
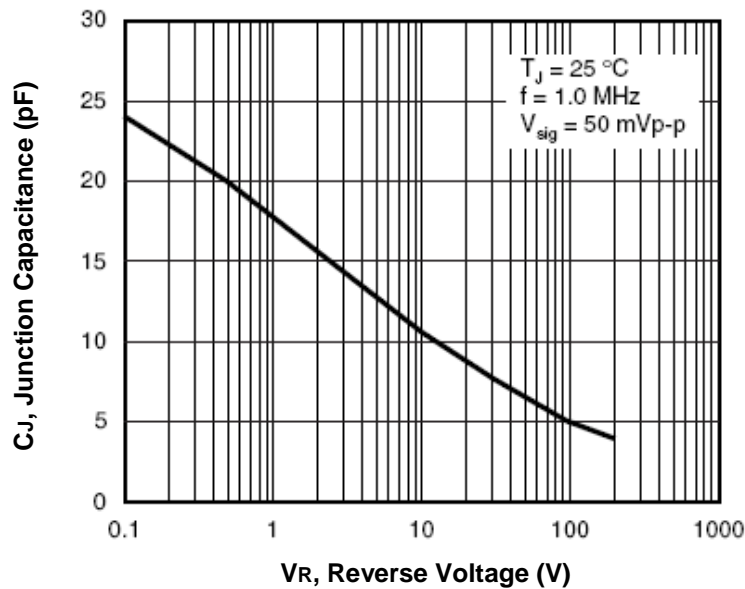


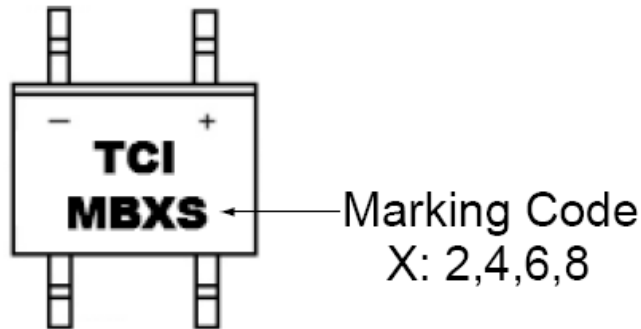
Fig.5-Typical Junction Capacitance per leg



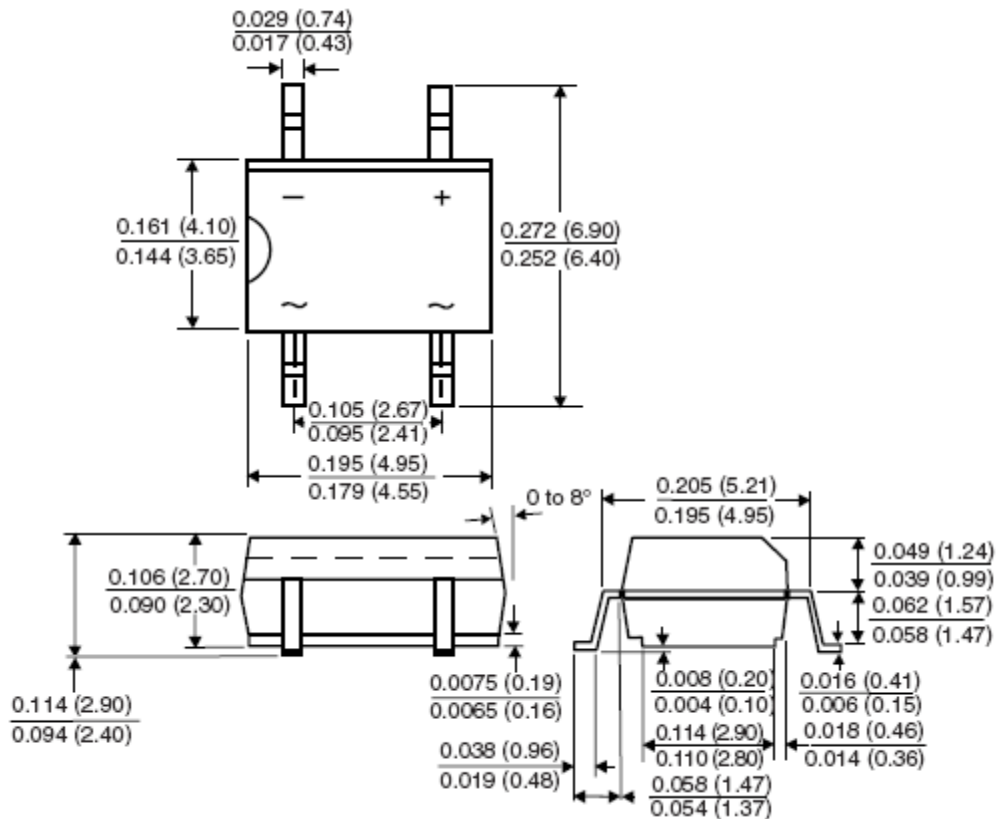
0.5A Surface Mount Bridge Rectifier

MB2S – MB8S

Marking Information:



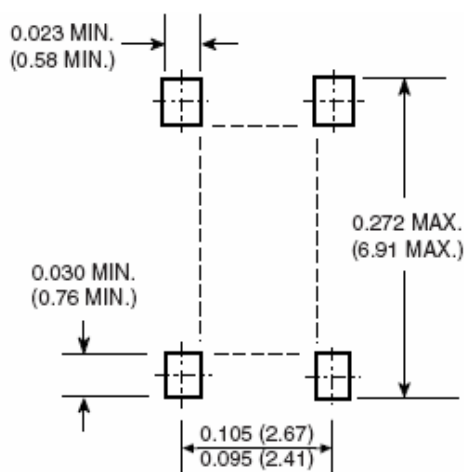
Dimensions in inch (mm)



0.5A Surface Mount Bridge Rectifier

MB2S – MB8S

Mounting Pad Layout in inch (mm)



MBS

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