

1.0A Surface Mount Bridge Rectifier

Features

- Glass passivated chip junction
- Low forward voltage drop
- High surge current capability
- Ideal for printed circuit boards
- Designed for surface mount application
- High temperature soldering guaranteed: 260°C/10 seconds
0.375" (9.5mm) lead length at 5lbs.(2.3kg) tension
- This series is UL recognized under component index, File number E194718
- RoHS compliant



DFMS



Mechanical Data

Case:	DFMS, Molded plastic body over passivated junction
Epoxy:	Plastic package has UL flammability classification 94V-0
Terminals:	Plated leads solderable per MIL-STD-202, method 208
Polarity:	As marked on body
Weight:	0.014 ounce, 0.4 grams

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

Symbol	Description	DF 005S	DF 01S	DF 02S	DF 04S	DF 06S	DF 08S	DF 10S	DF 12S	Unit	Conditions
V_{RRM}	Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	1200	V	
V_{RMS}	Maximum RMS Voltage	35	70	140	280	420	560	700	840	V	
V_{DC}	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	1200	V	
I_{F(AV)}	Maximum Average Forward Rectified Current	1.0								A	TA=40° C Note 1
I_{FSM}	Peak Forward Surge Current	50								A	8.3ms Single Sine-wave Superimposed on Rated Load (JEDEC Method)

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DF005S – DF12S

Symbol	Description	DF 005S	DF 01S	DF 02S	DF 04S	DF 06S	DF 08S	DF 10S	DF 12S	Unit	Conditions
I^2t	Rating for Fusing (t<8.3ms)	10								A ² sec	
V_F	Maximum Instantaneous Forward Voltage Drop per leg	1.1								V	$I_F=1.0A$
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage per leg	5.0								μA	$T_A=25^\circ C$
		500									$T_A=125^\circ C$
C_J	Typical Junction Capacitance per leg	25								pF	$V_R=4V, f=1MHz$
$R_{\theta JA}$	Typical Thermal Resistance per leg	40								$^\circ C/W$	Note 1
$R_{\theta JL}$		15									
T_J, T_{STG}	Operating Junction and Storage Temperature Range	-55 to +150								$^\circ C$	

Note: 1.Units mounted on P.C.B. with 0.51 x 0.51" (13 x 13mm) copper pads.

Rating and Characteristic Curves

Fig.1- Derating Curve Output Rectified Current

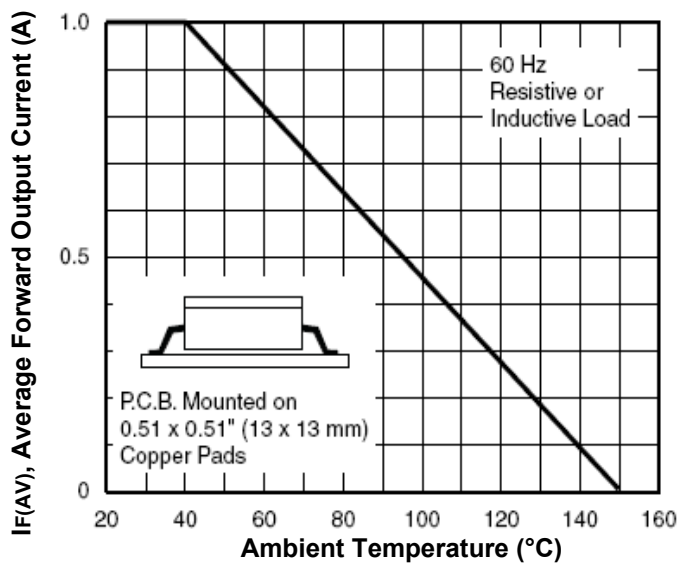
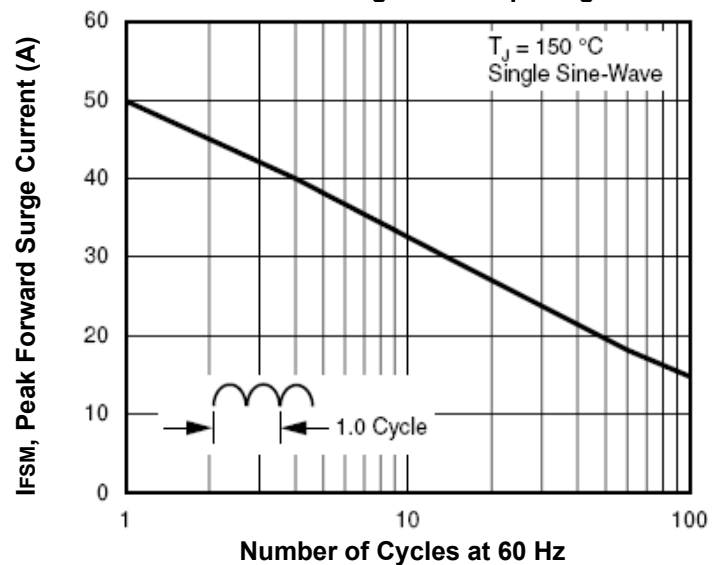


Fig.2-Maximum Non-Repetitive Peak Forward Surge Current per leg



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Fig.3-Typical Forward Characteristics per leg

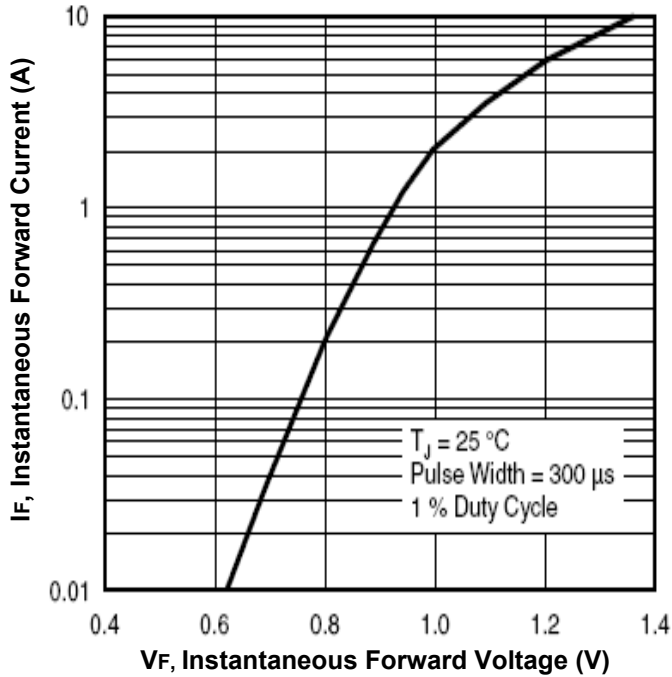


Fig.4-Typical Reverse Leakage Characteristics per leg

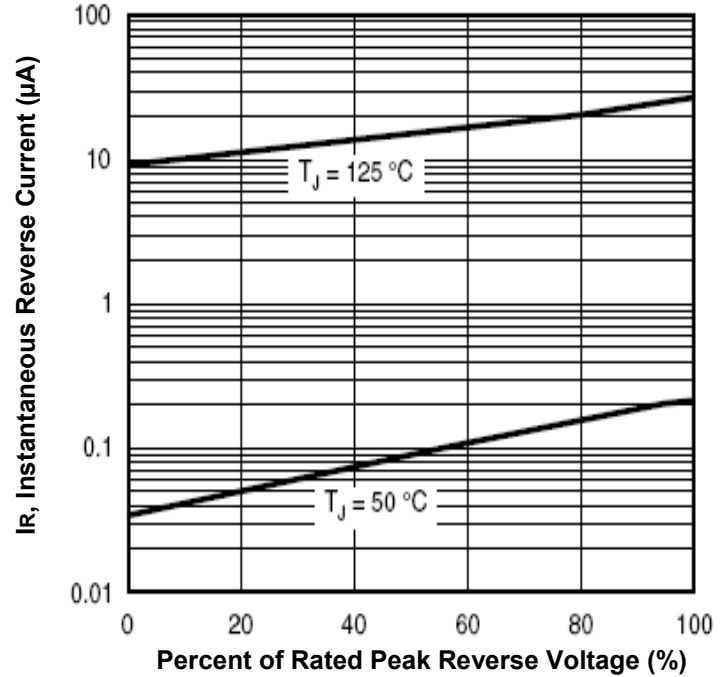
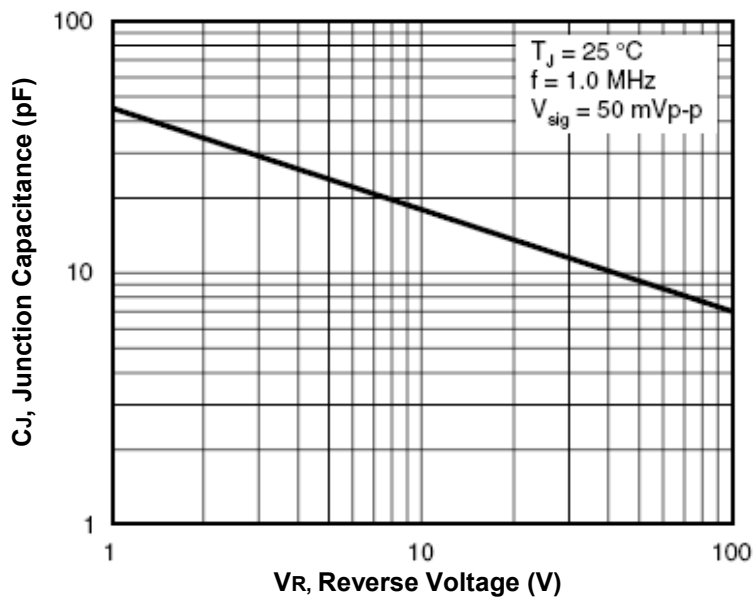


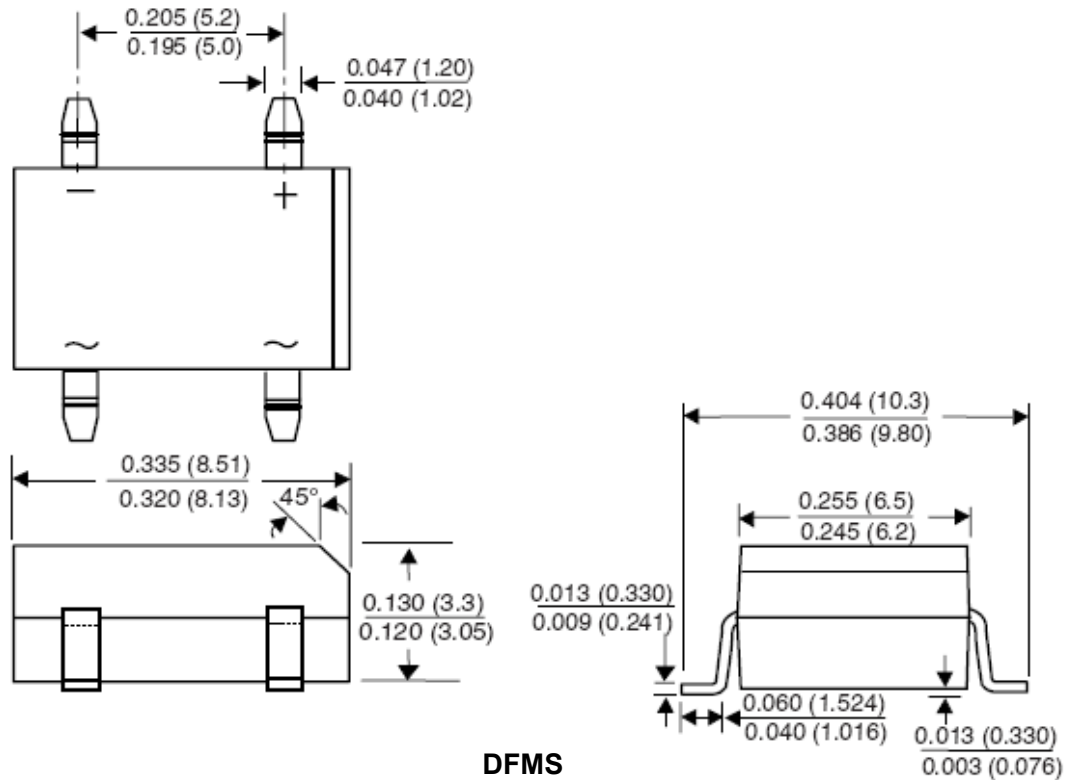
Fig.5- Typical Junction Capacitance per leg



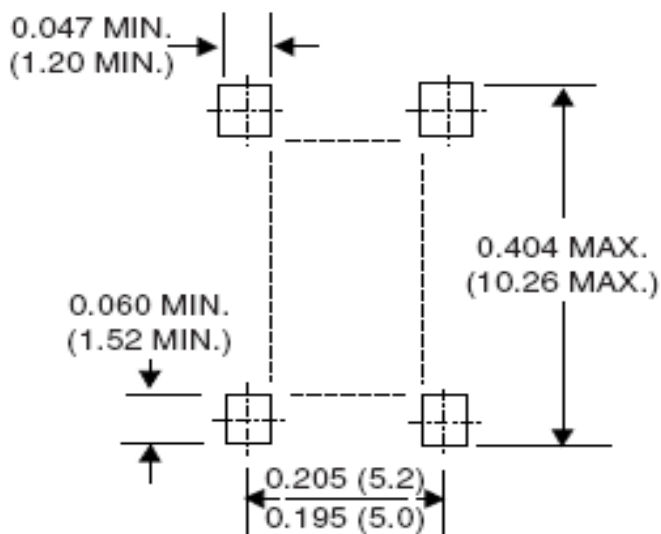
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Dimensions in inch (mm)



Mounting Pad Layout in inch (mm)



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