

## 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
- RoHS compliant



DFS



### Mechanical Data

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

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

Symbol	Description	DF 005S	DF 01S	DF 02S	DF 04S	DF 06S	DF 08S	DF 10S	DF 12S	Unit	Conditions
<b>V<sub>RRM</sub></b>	Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	1200	V	
<b>V<sub>RMS</sub></b>	Maximum RMS Voltage	35	70	140	280	420	560	700	840	V	
<b>V<sub>DC</sub></b>	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	1200	V	
<b>I<sub>F(AV)</sub></b>	Maximum Average Forward Rectified Current	1.0								A	T <sub>A</sub> =40° C Note 1
<b>I<sub>FSM</sub></b>	Peak Forward Surge Current	50								A	8.3ms Single Sine-wave Superimposed on Rated Load (JEDEC Method)
<b>I<sup>2</sup><sub>t</sub></b>	Rating for Fusing (t<8.3ms)	10								A <sup>2</sup> sec	

# 1.0A Surface Mount Bridge Rectifier

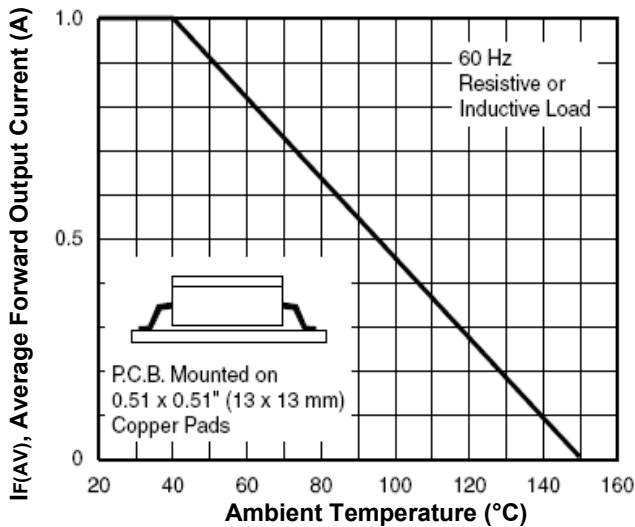
## DF005S – DF12S

Symbol	Description	DF 005S	DF 01S	DF 02S	DF 04S	DF 06S	DF 08S	DF 10S	DF 12S	Unit	Conditions
<b>V<sub>F</sub></b>	Maximum Instantaneous Forward Voltage Drop per leg	1.1								V	I <sub>F</sub> =1.0A
<b>I<sub>R</sub></b>	Maximum DC Reverse Current at Rated DC Blocking Voltage per leg	5.0								μA	TA=25°C
		500									TA=125°C
<b>C<sub>J</sub></b>	Typical Junction Capacitance per leg	25								pF	V <sub>R</sub> =4V, f=1MHz
<b>R<sub>θJA</sub></b>	Typical Thermal Resistance per leg	40								°C/W	Note 1
<b>R<sub>θJL</sub></b>		15									
<b>T<sub>J</sub>, T<sub>STG</sub></b>	Operating Junction and Storage Temperature Range	-55 to +150								°C	

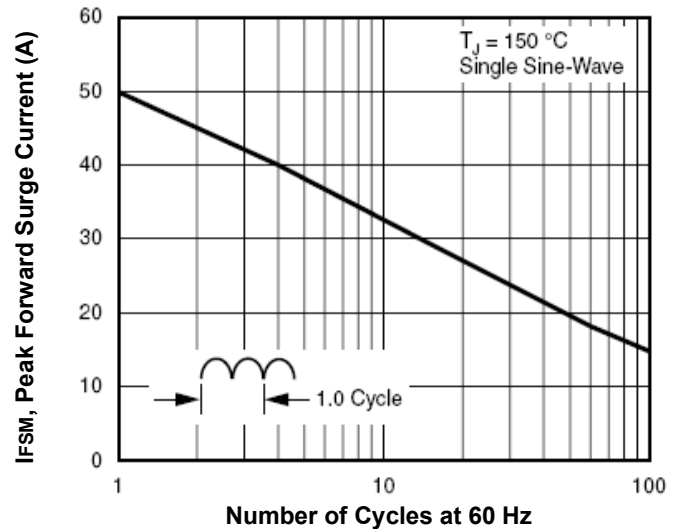
**Note:** 1.Units mounted on P.C.B. with 0.51 x 0.51" (13 x 13mm) copper pads.

### Rating and Characteristic Curves

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



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



# 1.0A Surface Mount Bridge Rectifier

## DF005S – DF12S

Fig.3-Typical Forward Characteristics per leg

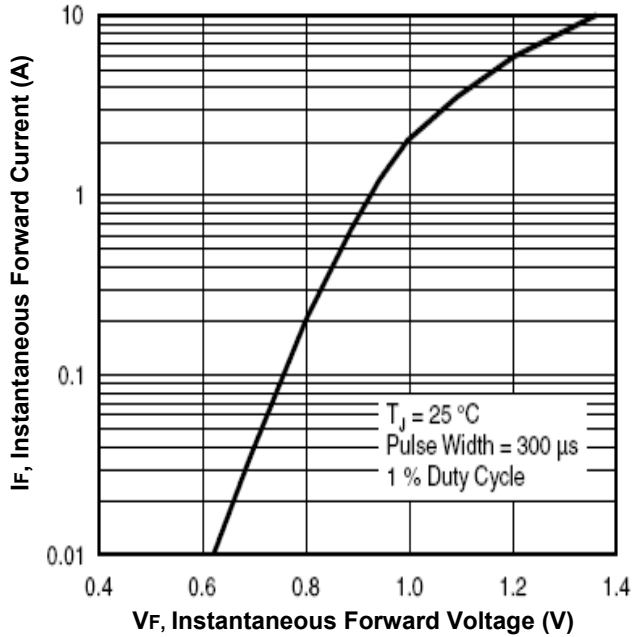


Fig.4-Typical Reverse Leakage Characteristics per leg

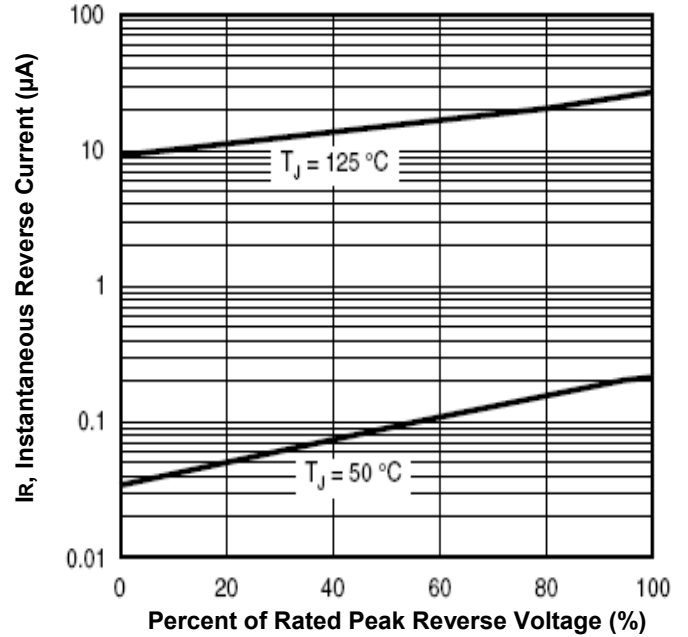
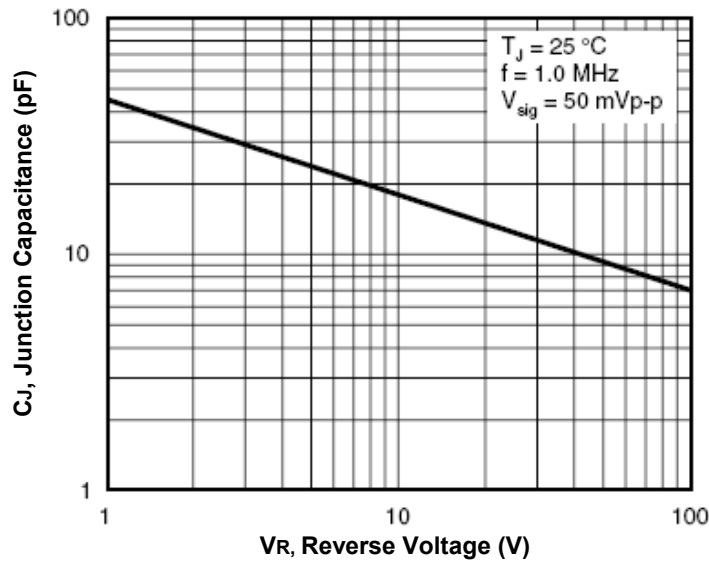


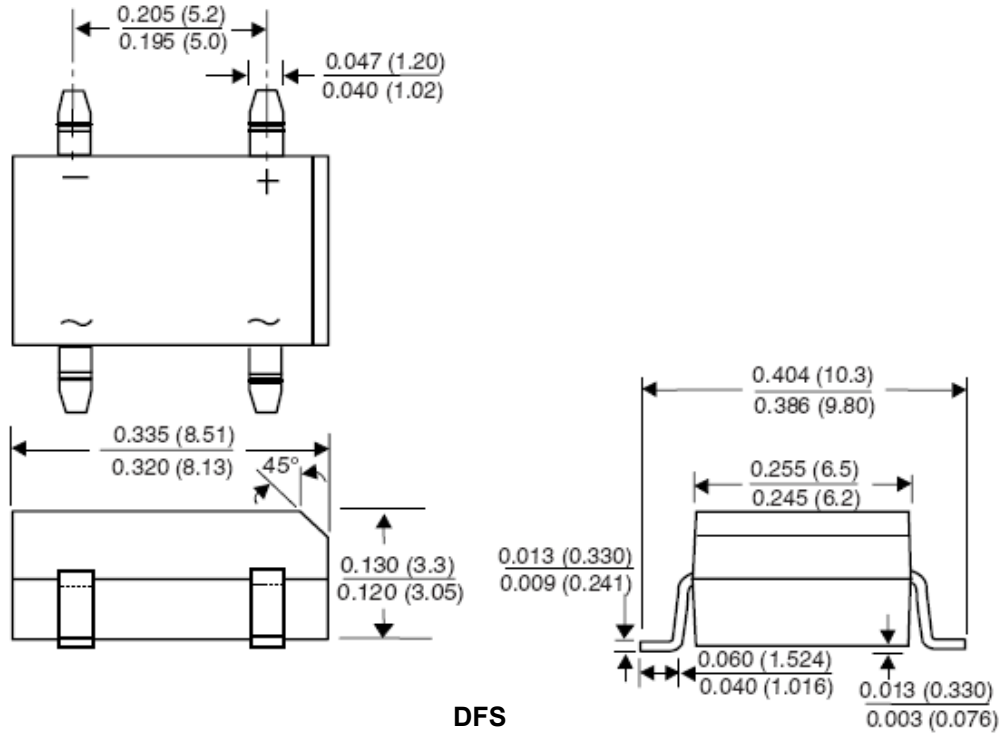
Fig.5- Typical Junction Capacitance per leg



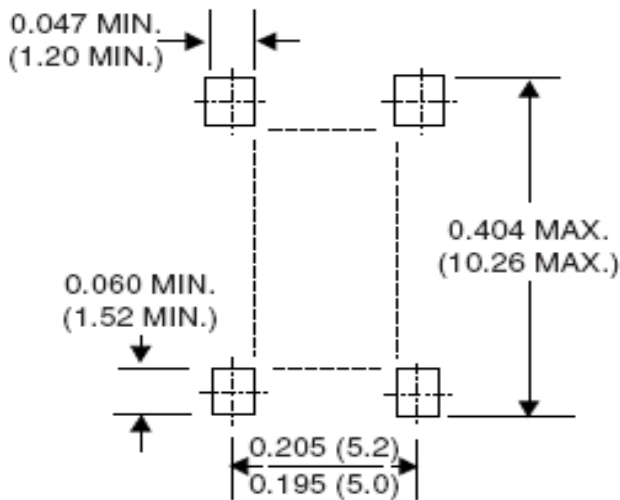
# 1.0A Surface Mount Bridge Rectifier

DF005S – DF12S

## Dimensions in inch (mm)



## Mounting Pad Layout in inch (mm)



# 1.0A Surface Mount Bridge Rectifier

DF005S – DF12S

## How to contact us:

### US HEADQUARTERS

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800) TAITRON (800) 824-8766 (661) 257-6060

Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415

Email: [taitron@taitroncomponents.com](mailto:taitron@taitroncomponents.com)

Http://[www.taitroncomponents.com](http://www.taitroncomponents.com)

### TAITRON COMPONENTS MEXICO, S.A .DE C.V.

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P.  
42970 MEXICO

Tel: +52-55-5560-1519

Fax: +52-55-5560-2190

### TAITRON COMPONENTS INCORPORATED REPRESENTAÇÕES DO BRASIL LTDA

RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001 BRAZIL

Tel: +55-11-5574-7949

Fax: +55-11-5572-0052

### TAITRON COMPONENTS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE

METROBANK PLAZA, 1160 WEST YAN' AN ROAD, SUITE 1503, SHANGHAI, 200052, CHINA

Tel: +86-21-5424-9942

Fax: +86-21-5424-9931