DF005S thru DF10S

Glass Passivated Bridge Rectifier

DFS

Primary Characteristics		
I_F	1	A
V_{RRM}	50~1000	V
I_{FSM}	30	A
V_F	1.1	V
T_J max	150	°C

Features

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop,high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has UL flammability classification 94V-0
- Lead temperature 260°C

Mechanical Date

- Polarit:As marked on Body
- Weight:0.02 ounces,0.38 grams
- Mounting position:Any

Ordering Information

Part No.	Package	Packing
DF005S thru DF10S	DFS	1500 / Tape & Reel

Maximum Ratings (TA=25°C unless otherwise specified)

Parameter	SYMBOL	DF005S	DF01S	DF02S	DF04S	DF06S	DF08S	DF10S	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current @T_A=40°C	I_F	1.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0							A
Maximum Instantaneous Forward Voltage I_F=1A @ 25°C	V_F	1.10							V
Maximum DC Reverse Current @ Tc=25°C at Rated DC Blocking Voltage @ Tc=125°C	I_R	10 500							uA
I^2t Rating for Fusing (t<8.3ms) I^2t A2s	I^2t	3.735							A^2s
Typical Junction capacitance Per Element(Note 1)	C_j	25							pF
Typical Thermal Resistance(Note 2)	$R_{\theta JA}$	40							°C/W
Operating Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

NOTES:

1.Measured at 1.0MHZ and applied reverse voltage of 4.0V DC

2.Thermal resistance from junction to ambient mounted on P.C.B with 0.5*0.5"(13*13mm) copper pads.

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Rating and Characteristics Curves

FIG.1-FORWARD CURRENT DERATING CURVE

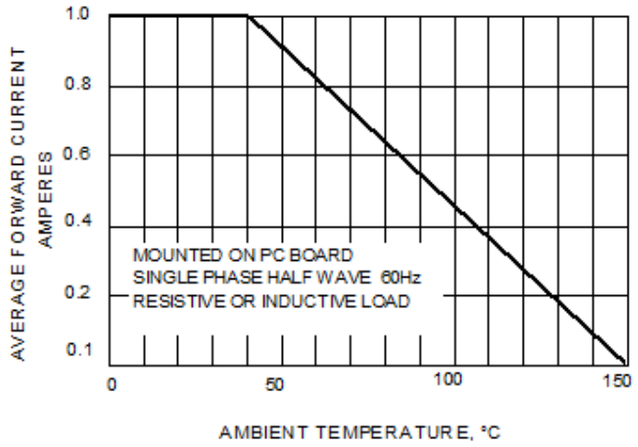


FIG.2-MXIMUM NON-REPETITIVE SURGE CURRENT

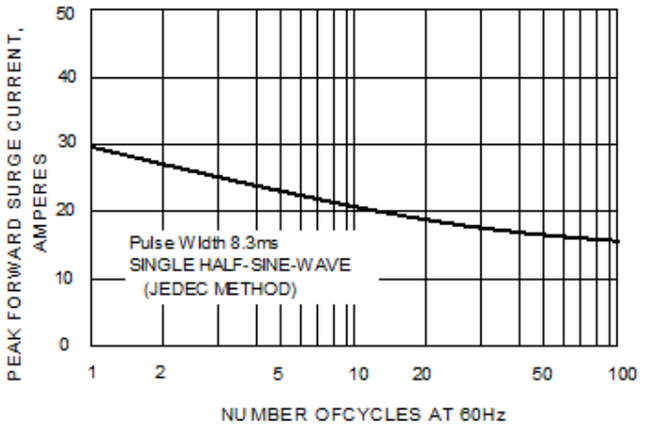


FIG.3-TYPICAL REVERSE CHARACTERISTICS

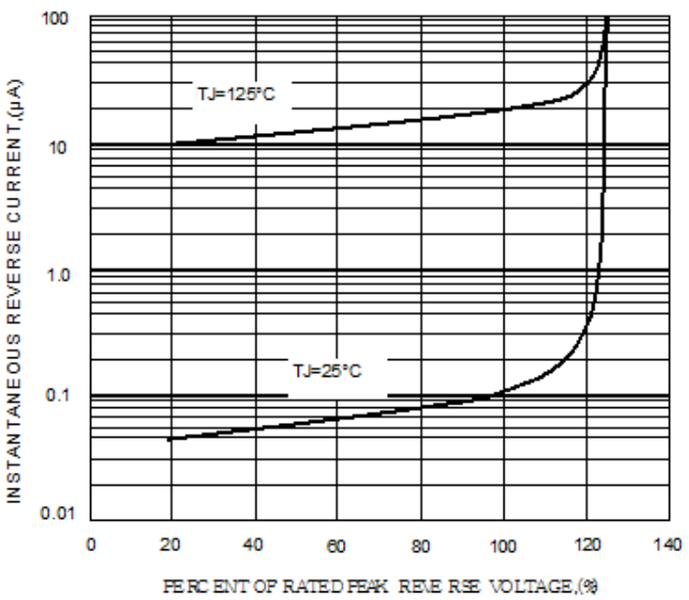
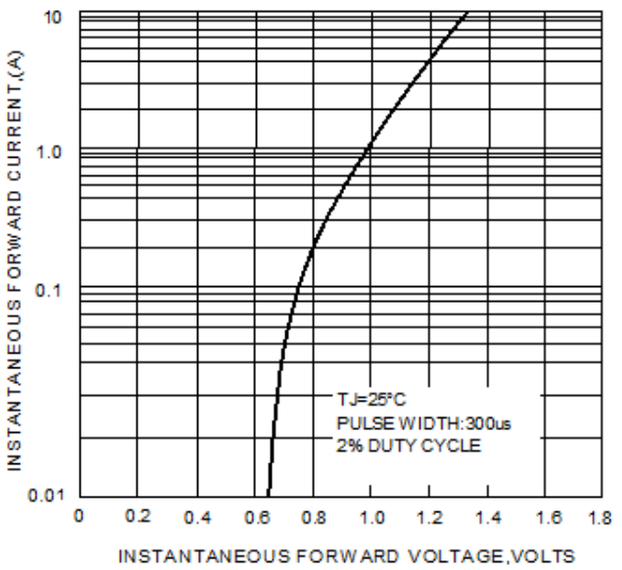


FIG.4-TYPICAL FORWARD CHARACTERISTICS



DF005S thru DF10S

RoHS Pb

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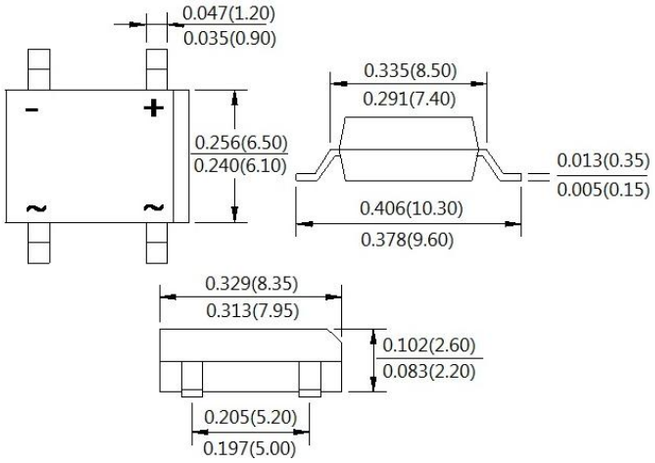
Package Outline Dimensions

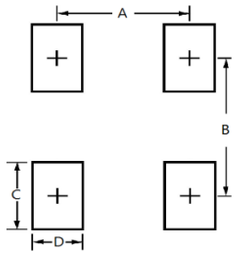


DFS

Dimensions in inches and (millimeters)

Suggested Pad Layout

Outline / Symbol	DFS millimeters
A	**5.12**
B	**8.73**
C	**2.22**
D	**1.20**



Tap & Reel Specification

Item	Symbol	Dimension
		Unit (mm)
Carrier width	A	8.64 ±0.1
Carrier length	B	10.41 ±0.1
Carrier depth	C	3.81 ±0.1
Sprocket hole	d	1.55 ±0.05
Reel outside diameter	D	330±1.0
Feed hole diameter	D0	13.5+1 /-0.5
Reel inner diameter	D1	75±1.0
Sprocket hole position	E	1.75±0.1
Punch hole position	F	7.50±0.05
Sprocket hole pitch	P	12.0±0.1
Sprocket hole pitch	Po	4.0±0.1
Embossment center	P1	2.0±0.05
Overall tape thickness	T	0.34 ±0.1
Tape width	W	12±0.15
Reel width	W1	17±1.0