SMD Glass Passivated Bridge Rectifiers



DF2005S-G Thru. DF210S-G

Reverse Voltage: 50 to 1000V

Forward Current: 2.0A

RoHS Device



Features

- -Rating to 1000V PRV
- -Ideal for printed circuit board.
- -Low forward voltage drop.
- -High current capability.
- -The plastic material has UL flammability classification 94V-0
- -UL recognized file # E217139

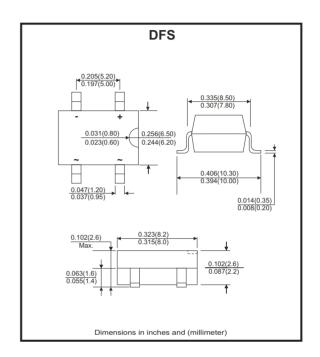


Mechanical Data

-Polarit: As marked on Body

-Weight: 0.02 ounces, 0.38 grams

-Mounting position: Any



Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave ,60Hz, resistive or inductive load. For capacitive load, derate current by 20%

Parameter	Symbol	DF 2005S-G	DF 201S-G	DF 202S-G	DF 204S-G	DF 206S-G	DF 208S-G	DF 210S-G	Unit
Maximum Recurrent Peak Reverse Voltage		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 @Ta=40°C	I _(AV)			•	2.0	•	•		А
Peak Forward Surage Current, 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	Ігѕм	60				А			
Maximum Forward Voltage at 2.0A DC	n Forward Voltage at 2.0A DC V _F		1.1						V
Maximum DC Reverse Current @TJ=25°C At Rate DC Blocking Voltage @TJ=125°C	lR	10 500			μА				
I ² T Rating for Fusing (t<8.3ms)	l ² t	10.4			A²s				
Typical Junction Capacitandce Per Element (Note 1)	CJ	25			pF				
Typical Thermal Resistance (Note 2) R _{BJA}		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 (DF2005S-G Thru. DF210S-G)

Fig.1 - Derating Curve For Output **Rcetified Current** 2.0 Bridge Output Full Wave Rectified 1.6 Current Average, (A) 1.2 0.8 Mounted on PC board, single phase half wave, 60Hz, resistive or inductive load 0 Ambient Temperature, (°C)

Peak Forward Surge Current, (A) 60 50 40 30

Single half sine wave (JEDEC Method)

20

10

0

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

Number of Cycle at 60Hz

20

Fig.3 - Typical Junction Capacitance

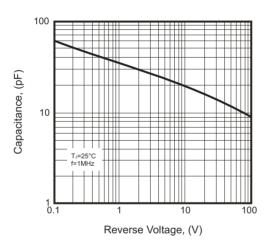


Fig.4 - Typical Forward Characteristics

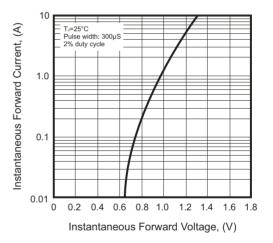
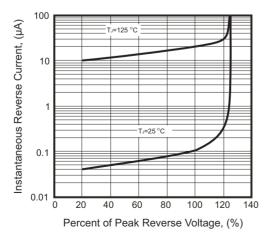


Fig.5 - Typical Reverse Characteristics

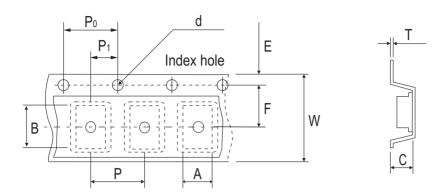


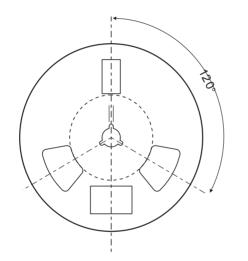
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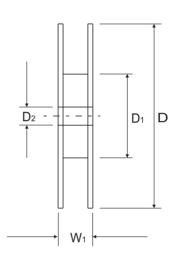
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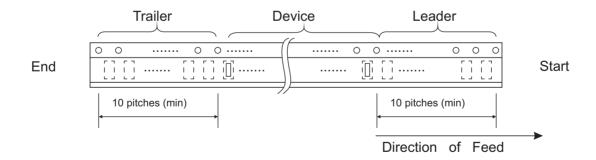


Reel Taping Specification









	SYMBOL	Α	В	С	d	D	D1	D2
DFS	(mm)	8.64 ± 0.10	10.41 ± 0.10	3.81 ± 0.10	1.55 ± 0.05	330	50.0 MIN.	13.00 ± 0.20
	(inch)	0.340 ± 0.004	0.409 ± 0.004	0.150 ± 0.004	0.061 ± 0.002	13	1.969 MIN.	0.512 ± 0.008

ı		SYMBOL	E	F	Р	Po	P1	T	W	W 1
	DFS	(mm)	1.75 ± 0.10	7.50 ± 0.05	12.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.32	16.00 ± 0.30	16.00~18.40
ı		(inch)	0.069 ± 0.004	0.295 ± 0.002	0.472 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.013	0.630 ± 0.012	0.630~0.724

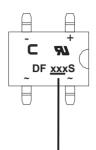
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Marking Code

Part Number	Marking code	Packaging
DF2005SP-G	DF2005S	Tube
DF201SP-G	DF201S	Tube
DF202SP-G	DF202S	Tube
DF204SP-G	DF204S	Tube
DF206SP-G	DF206S	Tube
DF208SP-G	DF208S	Tube
DF210SP-G	DF210S	Tube
DF2005ST-G	DF 2005S	Reel
DF201ST-G	DF201S	Reel
DF202ST-G	DF202S	Reel
DF204ST-G	DF204S	Reel
DF206ST-G	DF206S	Reel
DF208ST-G	DF208S	Reel
DF210ST-G	DF210S	Reel



XXX / XXXX = Product type marking code C = Comchip Logo

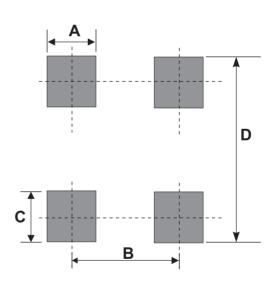
Note:

1) Suffix code after part number to specify packaging item .

Packaging	Code
TUBE PACK	Р
REEL PACK	Т

Suggested PAD Layout

SIZE	DFS			
SIZE	(mm)	(inch)		
Α	1.20 Min	0.047 Min		
В	5.21 REF	0.205 REF		
С	1.52 Min	0.060 Min		
D	10.26 Max	0.404 Max		



Standard Packaging

	TUBE PACK			
Case Type	TUBE (pcs)	Carton (pcs)		
DFS	50	10,000		

	REEL PACK			
Case Type	REEL (pcs)	Reel Size (inch)		
DFS	1,000	13		

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