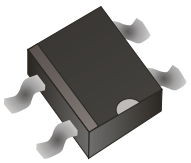
DF005S-G Thru. DF10S-G

Reverse Voltage: 50 to 1000V
Forward Current: 1.0A
RoHS Device



Features

-Rating to 1000V PRV

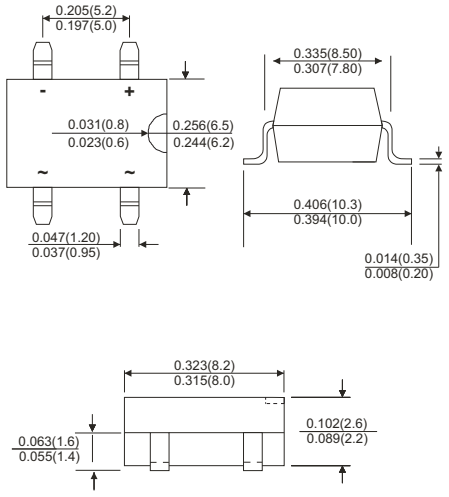
-Ideal for printed circuit board

-Low forward voltage drop.

-High current capability.

-The plastic material has UL flammability classification 94V-0

DFS



Dimensions in inches and (millimeter)

Mechanical Data

-Polarit:As marked on Body

-Weight: 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	DF005S-G	DF01S-G	DF02S-G	DF04S-G	DF06S-G	DF08S-G	DF10S-G	Unit
Maximum Reverse Peak Repetitive 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	$I_{(AV)}$	1.0							A
Peak Forward Surage Current , 8.3ms Single Half Sine-Wave Super Imposed On Rated Load	I_{FSM}	30							A
I^2t Rating for Fusing (t＜8.3ms)	I^2t	10.4							A^2s
Maximum Forward Voltage at 1.0A DC	V_F	1.1							V
Maximum Reverse Current @T_J=25°C At Rated DC Blocking Voltage @T_J=125°C	I_R	10 500							μA
Typical Junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							°C/W
Operating Temperature Range	T_J	-55 ~ +150							°C
Storage Temperature Range	T_{STG}	-55 ~ +150							°C

Notes:
1. Measured at 1.0MHz and applied reverse voltage of 4.0V.
2. Unit mounted on P.C.B with 0.51"×0.51" (13×13mm) copper pads.

Company reserves the right to improve product design , functions and reliability without notice.

Rating and Characteristics Curves (DF005S-G Thru. DF10S-G)

Fig.1 - Forward Current Derating Curve

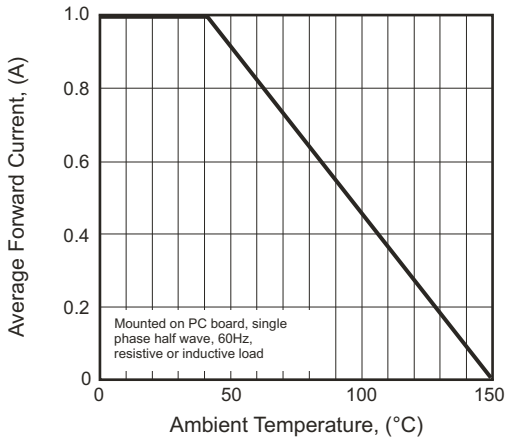


Fig.2 - Maximum Non-repetitive Surge Current

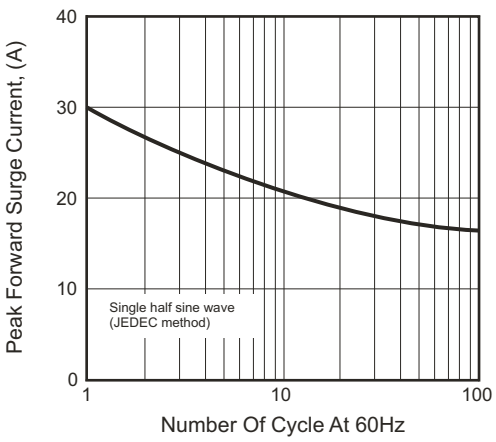


Fig.3 - Typical Junction Capacitance

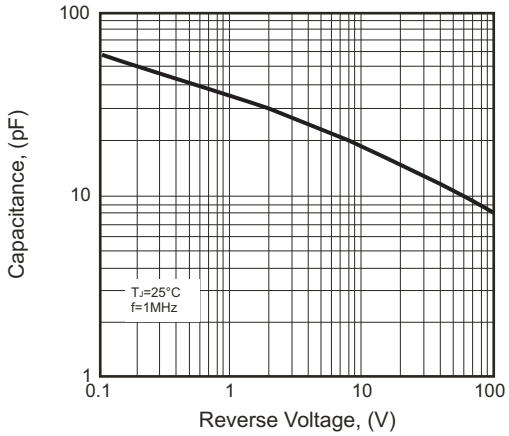


Fig.4 - Typical Forward Characteristics

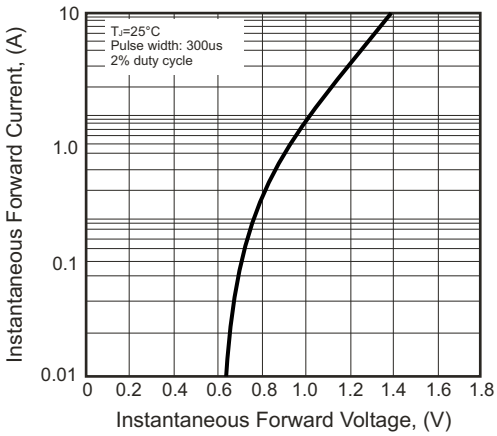
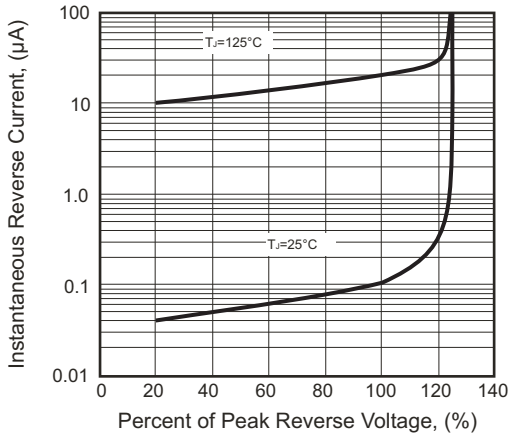
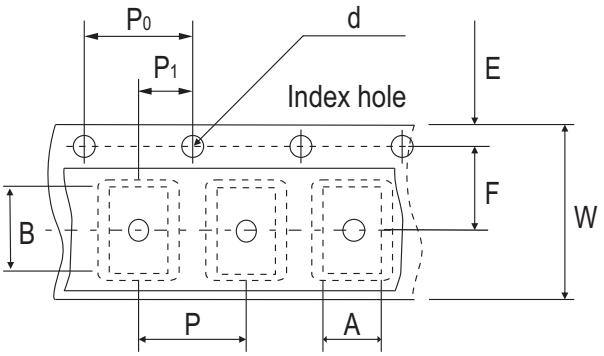
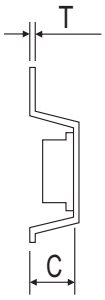


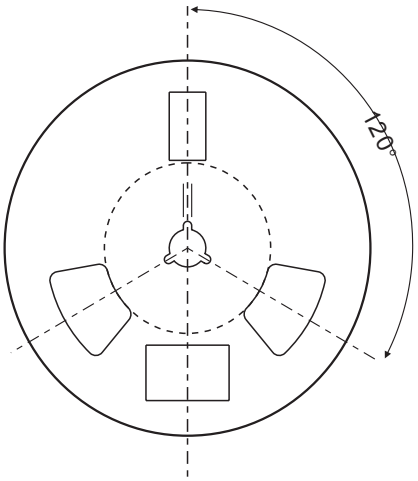
Fig.5 - Typical Reverse Characteristics

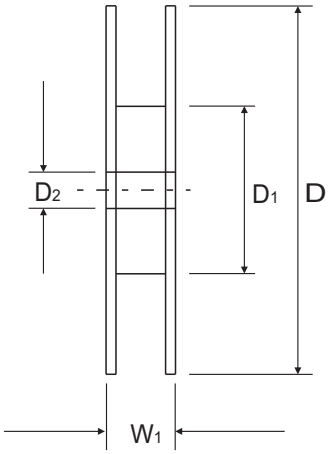


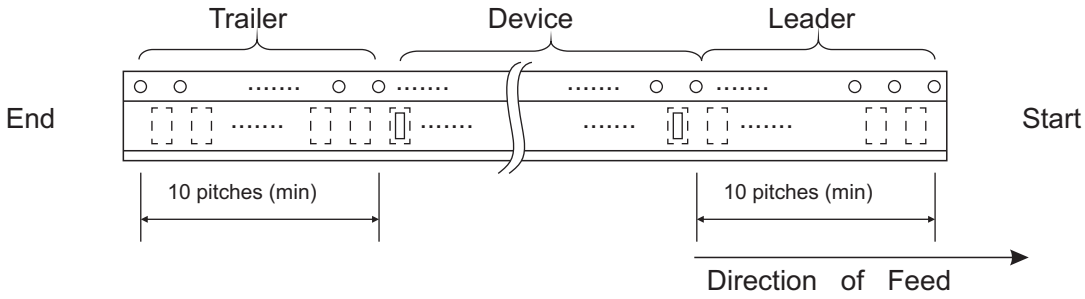
Reel Taping Specification











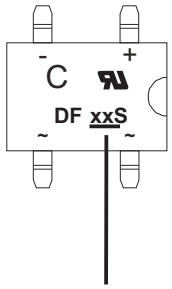
	SYMBOL	A	B	C	d	D	D1	D2
DFS	(mm)	8.64 ± 0.10	10.41 ± 0.10	3.81 ± 0.10	1.55 ± 0.05	330	50.0 MIN.	13.00 ± 0.20
	(inch)	0.340 ± 0.004	0.409 ± 0.004	0.150 ± 0.004	0.061 ± 0.002	13	1.969 MIN.	0.512 ± 0.008

	SYMBOL	E	F	P	P0	P1	T	W	W1
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
	(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

Company reserves the right to improve product design , functions and reliability without notice.

Marking Code

Part Number	Marking code	Packaging
DF005SP-G	DF005S	Tube
DF01SP-G	DF01S	Tube
DF02SP-G	DF02S	Tube
DF04SP-G	DF04S	Tube
DF06SP-G	DF06S	Tube
DF08SP-G	DF08S	Tube
DF10SP-G	DF10S	Tube
DF005ST-G	DF005S	Reel
DF01ST-G	DF01S	Reel
DF02ST-G	DF02S	Reel
DF04ST-G	DF04S	Reel
DF06ST-G	DF06S	Reel
DF08ST-G	DF08S	Reel
DF10ST-G	DF10S	Reel



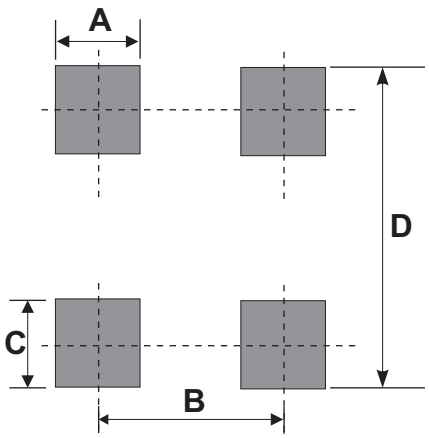
XX / XXX = Product type marking code
C = Comchip Logo

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

Packaging	Code
TUBE PACK	P
REEL PACK	T

Suggested PAD Layout

SIZE	DFS	
	(mm)	(inch)
A	1.20 Min	0.047 Min
B	5.21 REF	0.205 REF
C	1.52 Min	0.060 Min
D	10.26 Max	0.404 Max



Standard Packaging

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

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

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Mouser Electronics

Authorized Distributor

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Comchip Technology:

DF01S-G DF02S-G DF08S-G DF02ST-G DF04ST-G DF10ST-G DF06ST-G DF01ST-G DF08ST-G DF005ST-G DF10S-G