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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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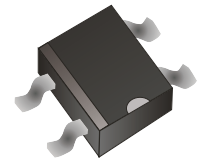


## DF15005S-G Thru. DF1510S-G

Reverse Voltage: 50 to 1000V

Forward Current: 1.5A

RoHS Device

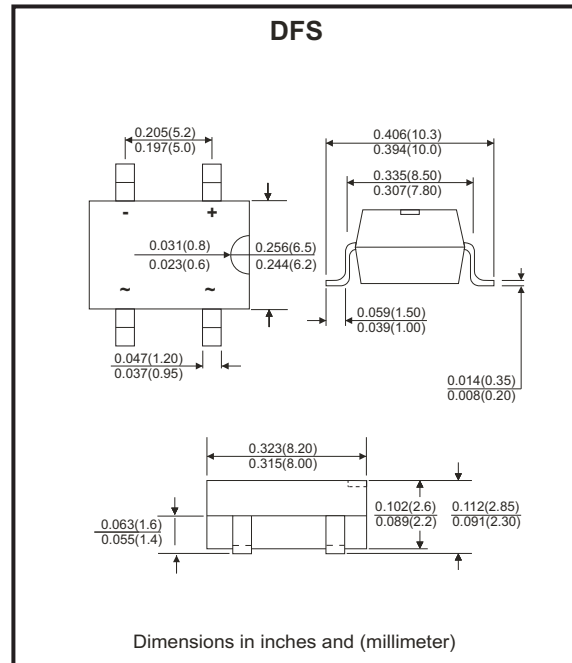


### Features

- 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 # E349301

### Mechanical Data

- Polarity: 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	DF 15005S-G	DF 1501S-G	DF 1502S-G	DF 1504S-G	DF 1506S-G	DF 1508S-G	DF 1510S-G	Unit
Maximum Recurrent 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 @ $T_A=40^{\circ}C$	$I_{(AV)}$	1.5							A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	$I_{FSM}$	50							A
Maximum Forward Voltage at 1.5A DC	$V_F$	1.1							V
Maximum DC Reverse Current @ $T_J=25^{\circ}C$ At Rate DC Blocking Voltage @ $T_J=125^{\circ}C$	$I_R$	5 500							$\mu A$
$I^2T$ Rating for Fusing ( $t<8.3ms$ )	$I^2t$	10.4							$A^2s$
Typical Junction Capacitance Per Element (Note 1)	$C_J$	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							$^{\circ}C/W$
Operating Temperature Range	$T_J$	-55 to +150							$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^{\circ}C$

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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REV: G

## Rating and Characteristics Curves (DF15005S-G Thru. DF1510S-G)

Fig.1 - Forward Current Derrent Curve

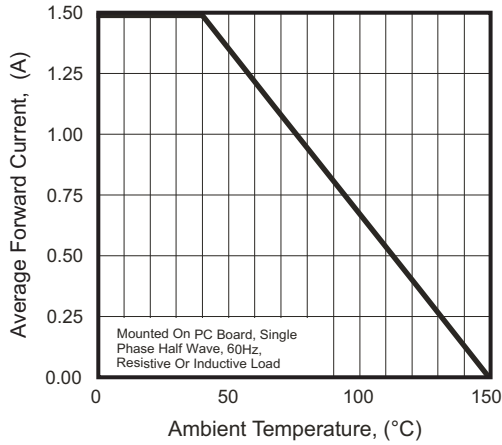


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

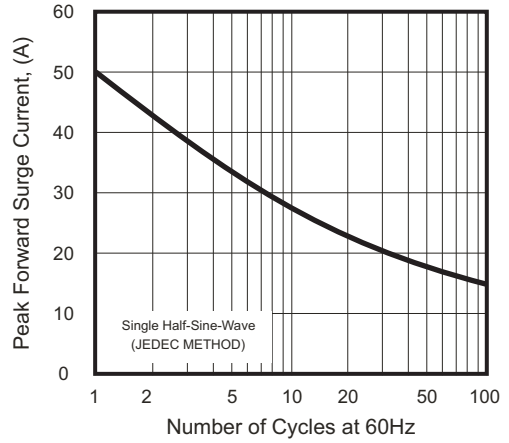


Fig.3 - Typical Junction Capacitance

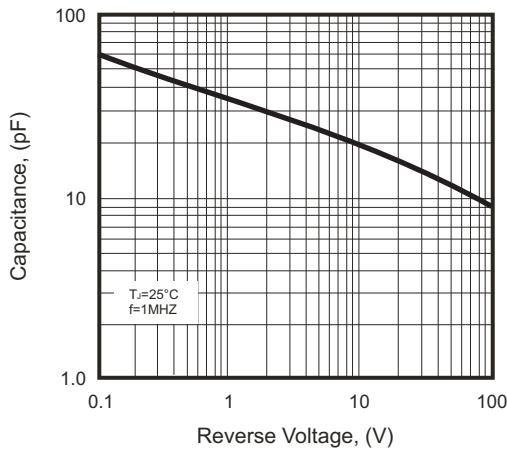


Fig.4 - Typical Forward Characteristics

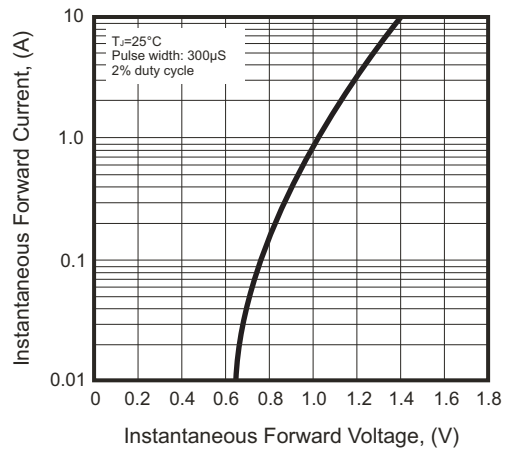
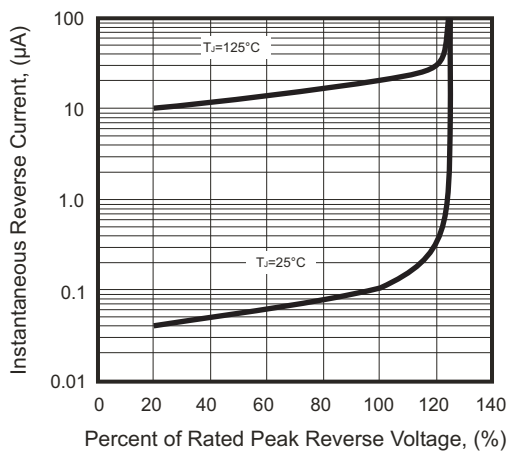


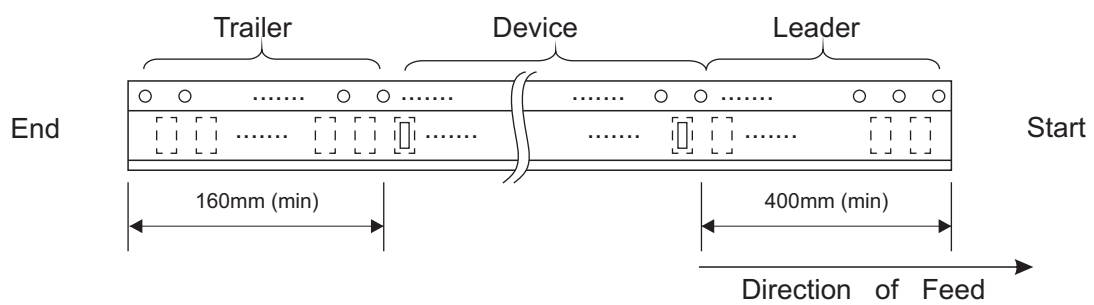
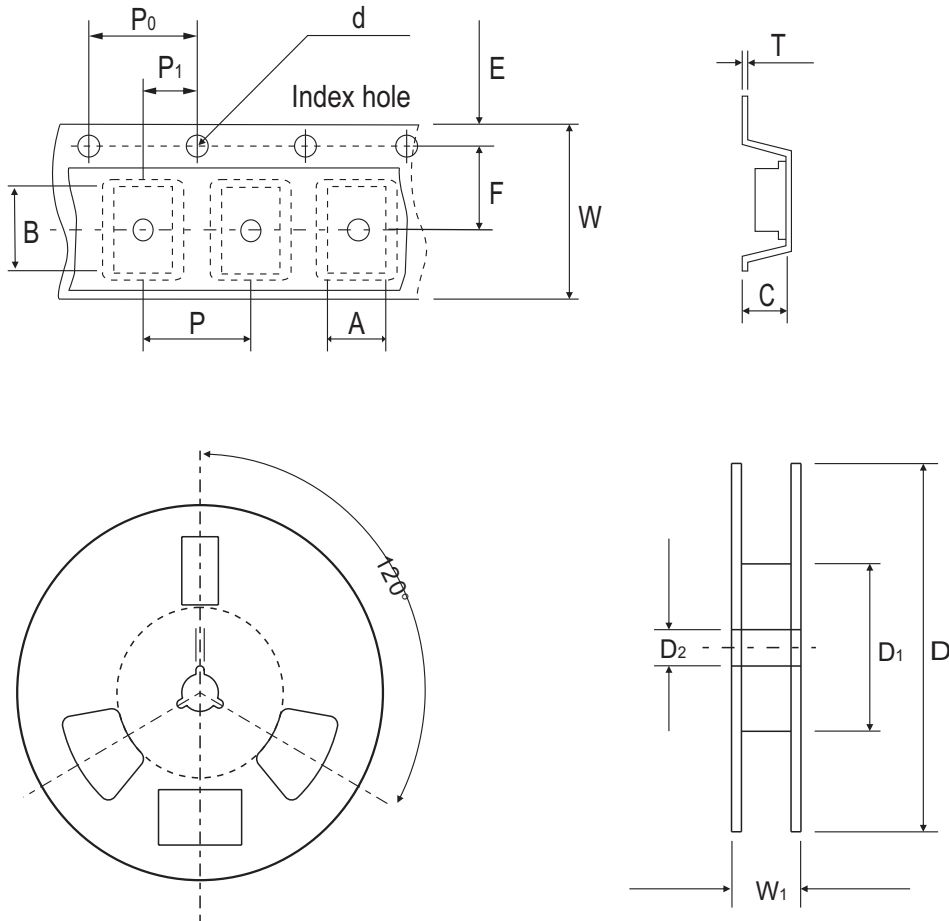
Fig.5 - Typical Reverse Characteristics



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## Reel Taping Specification



DFS	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>
	(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

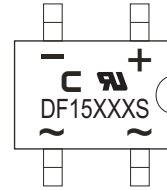
DFS	SYMBOL	E	F	P	P <sub>0</sub>	P <sub>1</sub>	T	W	W <sub>1</sub>
	(mm)	1.75 ± 0.10	7.50 ± 0.05	12.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.32	16.00 ± 0.30	16.00~18.40
	(inch)	0.069 ± 0.004	0.295 ± 0.002	0.472 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.013	0.630 ± 0.012	0.630~0.724

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## Marking Code

Part Number	Marking code	Packaging
DF15005SP-G	DF15005S	Tube
DF1501SP-G	DF1501S	Tube
DF1502SP-G	DF1502S	Tube
DF1504SP-G	DF1504S	Tube
DF1506SP-G	DF1506S	Tube
DF1508SP-G	DF1508S	Tube
DF1510SP-G	DF1510S	Tube
DF15005ST-G	DF15005S	Reel
DF1501ST-G	DF1501S	Reel
DF1502ST-G	DF1502S	Reel
DF1504ST-G	DF1504S	Reel
DF1506ST-G	DF1506S	Reel
DF1508ST-G	DF1508S	Reel
DF1510ST-G	DF1510S	Reel



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

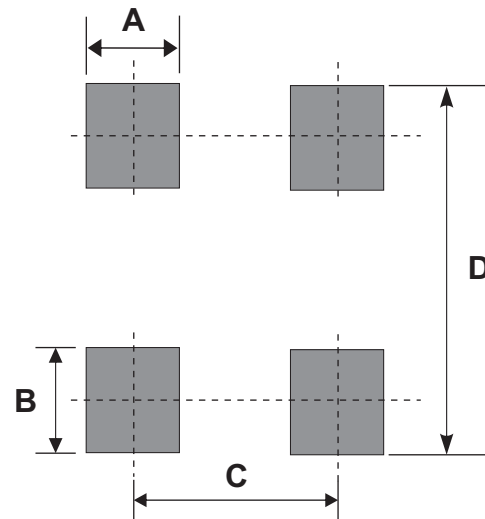
Note:

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	1.52 Min	0.060 Min
C	5.21 Ref	0.205 Ref
D	10.26 Max	0.404 Max



## Standard Packaging

Case Type	TUBE PACK	
	TUBE ( pcs )	BOX ( pcs )
DFS	50	5,000

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

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