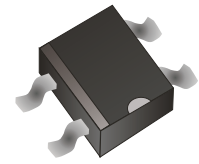


## DF15005S-G Thru. DF1510S-G

Reverse Voltage: 50 to 1000V

Forward Current: 1.5A

RoHS Device

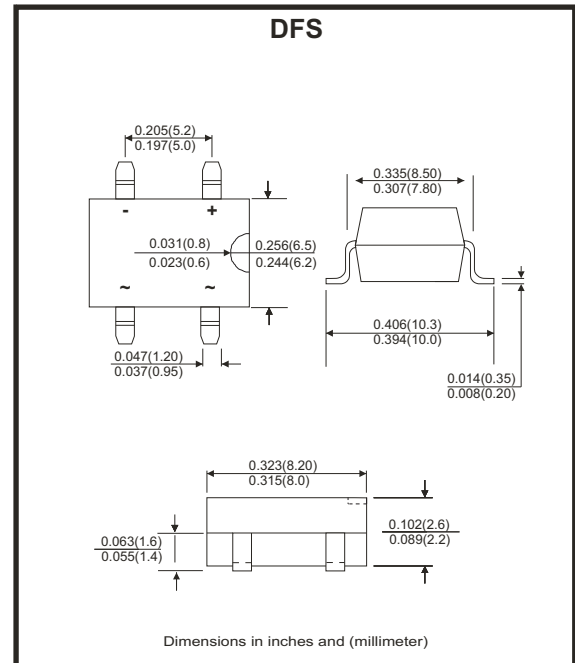


### Features

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

### 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	DF 15005S-G	DF 1501S-G	DF 1502S-G	DF 1504S-G	DF 1506S-G	DF 1508S-G	DF 1510S-G	Unit
	Marking	DF15005S	DF1501S	DF1502S	DF1504S	DF1506S	DF1508S	DF1510S	
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	$I_{FSM}$	50							A
$I^2 t$ Rating for Fusing ( $t < 8.3ms$ )	$I^2 t$	10.4							$A^2 s$
Maximum Forward Voltage at 1.5A DC	$V_F$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_J=25^\circ C$ @ $T_J=125^\circ C$	$I_R$	10 500							$\mu A$
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 ~ +150							$^\circ C$
Storage Temperature Range	$T_{STG}$	-55 ~ +150							$^\circ C$

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC
2. Unit mounted on P.C.B with 0.50"×0.50" (13×13mm) copper pads.

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

FIG. 1-Forward Current Derrent Curve

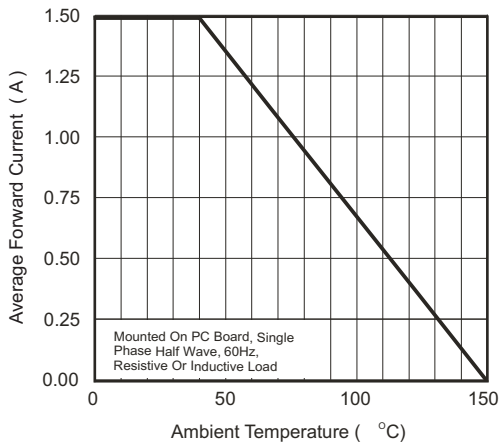


FIG. 2-Maximum Non-Repetitive Peak Forward Surge Current

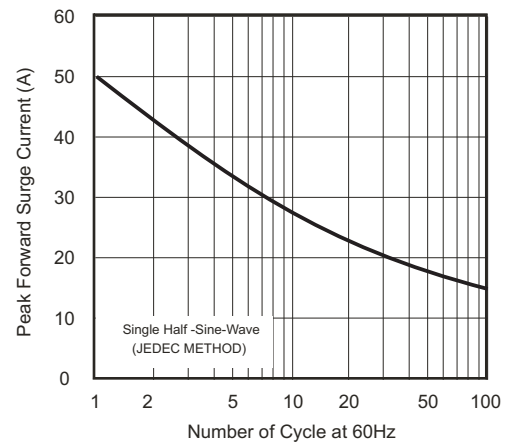


Fig. 3- Typical Junction Capacitance

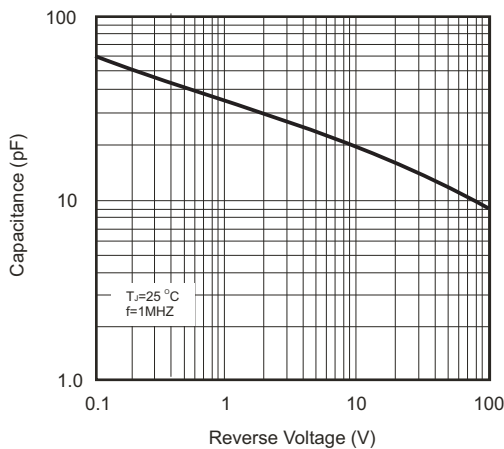


Fig. 4- Typical Forward Characteristics

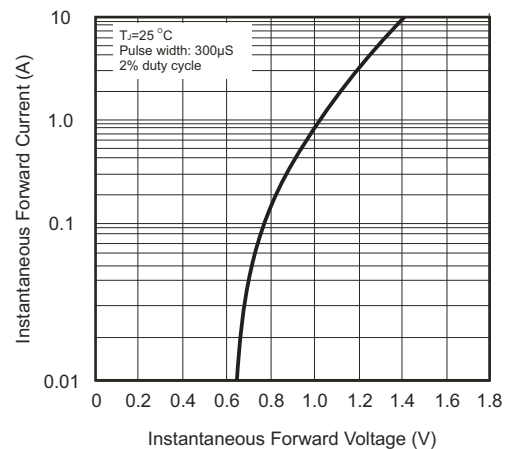
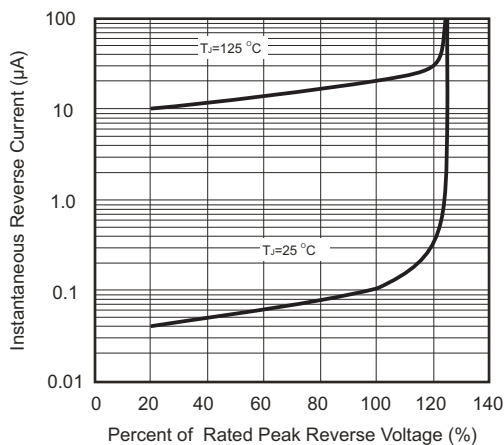
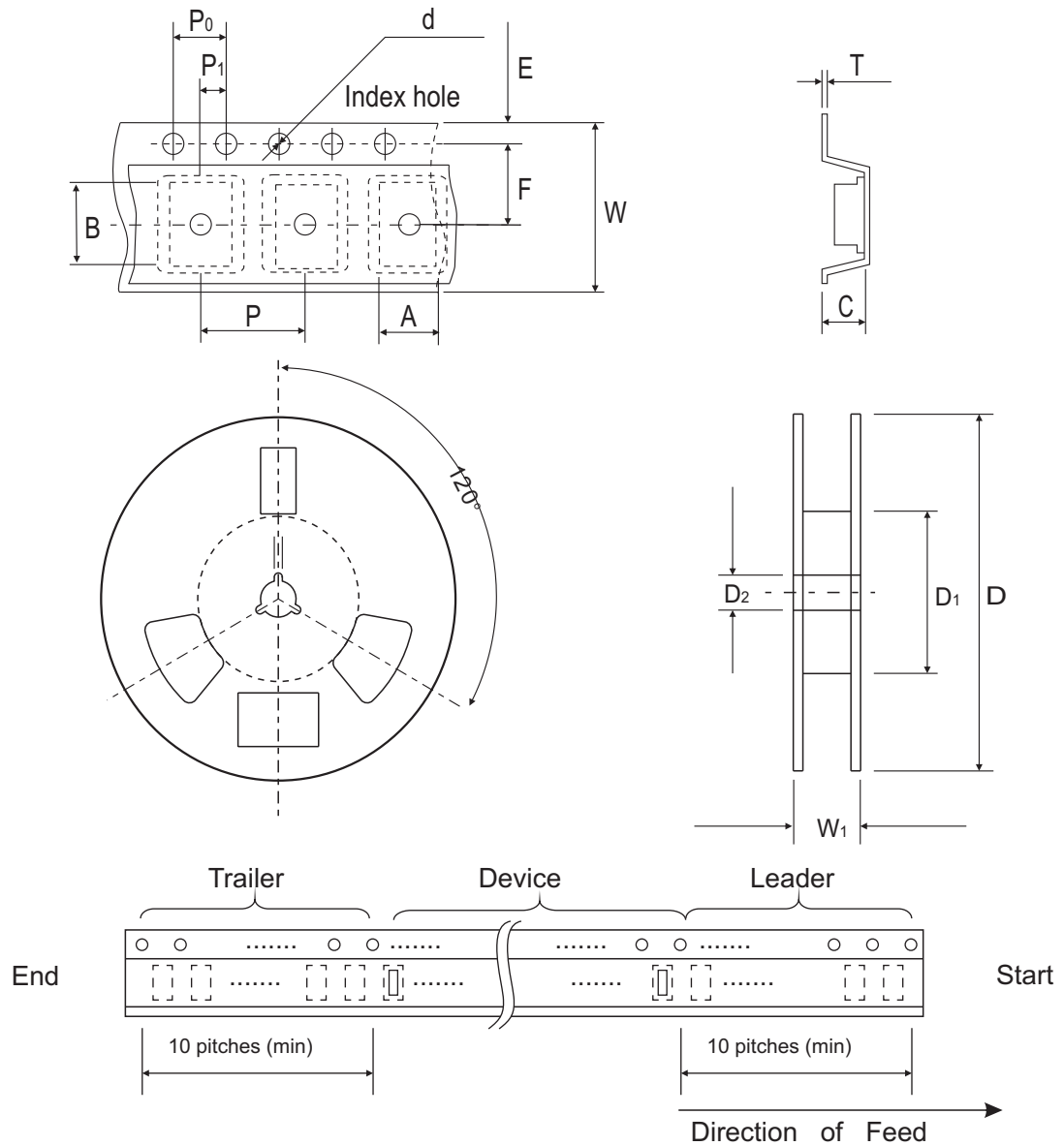


Fig. 5- Typical Reverse Characteristics



## Reel Taping Specification

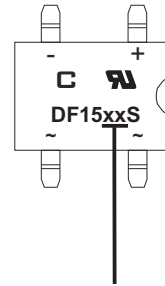


DFS	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	$8.64 \pm 0.10$	$10.41 \pm 0.10$	$3.81 \pm 0.10$	$1.55 \pm 0.10$	330	50.0 Min	$13.0 \pm 0.20$
	(inch)	$0.340 \pm 0.004$	$0.409 \pm 0.004$	$0.150 \pm 0.004$	$0.061 \pm 0.004$	13.00	1.969 Min	$0.512 \pm 0.008$

DFS	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	$1.75 \pm 0.10$	$7.50 \pm 0.05$	$12.00 \pm 0.10$	$4.00 \pm 0.10$	$2.00 \pm 0.10$	$16.0 \pm 0.30$	$16.00 \sim 18.40$
	(inch)	$0.069 \pm 0.004$	$0.295 \pm 0.002$	$0.472 \pm 0.004$	$0.157 \pm 0.004$	$0.079 \pm 0.004$	$0.630 \pm 0.012$	$0.630 \sim 0.724$

## Marking Code

Part Number	Marking code	Packaging
DF15005S-G	DF15005S	Tube
DF1501S-G	DF1501S	Tube
DF1502S-G	DF1502S	Tube
DF1504S-G	DF1504S	Tube
DF1506S-G	DF1506S	Tube
DF1508S-G	DF1508S	Tube
DF1510S-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**

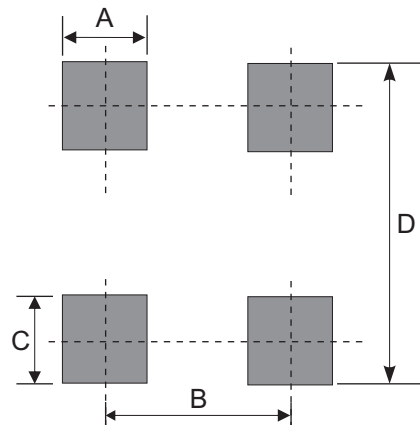
Note:

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

Packaging	Code
TUBE PACK	NA
REEL PACK	T

## Suggested PAD Layout

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



## Standard Package

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