

RoHS Device  
Halogen Free

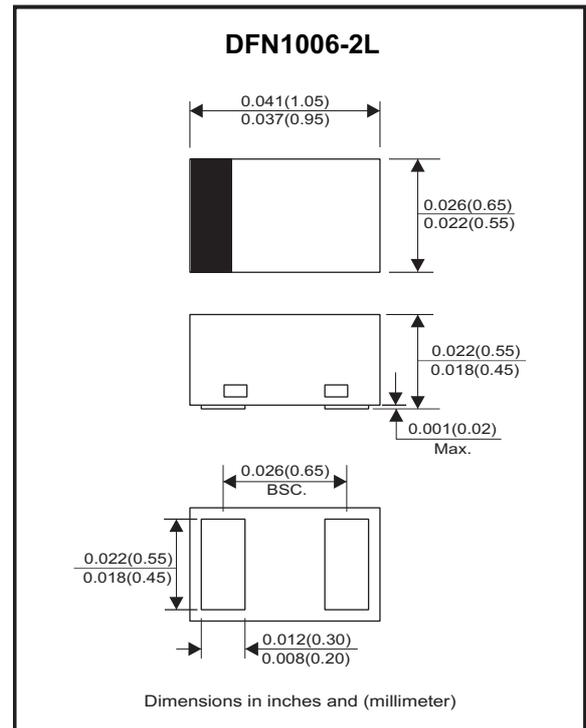


## Features

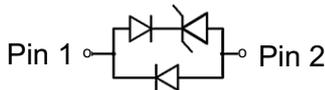
- Uni-directional ESD protection.
- IEC61000-4-2 Level 4 ESD protection.
- Surface mount package.
- Low capacitance.
- Low Leakage current.
- High component density.

## Mechanical data

- Case: DFN1006-2L/0402 standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Mounting position: Any.
- Weight: 0.001 gram(approx.).



## Circuit diagram



## Maximum Rating (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Value	Unit
Peak pulse power	$T_P = 8/20\mu\text{s}$	$P_{PP}$	60	W
Peak pulse current	$T_P = 8/20\mu\text{s}$	$I_{PP}$	4	A
ESD capability	IEC 61000-4-2(air) IEC 61000-4-2(contact)	ESD	$\pm 20$ $\pm 20$	kV
Operation temperature range		$T_j$	-55~+150	$^\circ\text{C}$
Storage temperature range		$T_{STG}$	-55~+150	$^\circ\text{C}$

## Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Working peak reverse voltage		$V_{RWM}$			5	V
Forward voltage	$I_F = 10\text{mA}$	$V_F$			1.5	V
Diode breakdown voltage	$I_T = 1\text{mA}$	$V_{BR}$	6.0			V
Reverse current	$V_{RWM} = 5\text{V}$	$I_R$			0.5	$\mu\text{A}$
Clamping voltage	$I_{PP} = 1\text{A}, T_P = 8/20\mu\text{s}$ $I_{PP} = 4\text{A}, T_P = 8/20\mu\text{s}$	$V_C$			11 15	V
Junction capacitance	$V_R = 0\text{V}, f = 1\text{MHz}$	$C_J$		0.9	1.3	pF

RATING AND CHARACTERISTIC CURVES (ESD5341N)

Fig.1 - 8/20us Peak Pulse Current Waveform Acc. IEC 61000-4-5

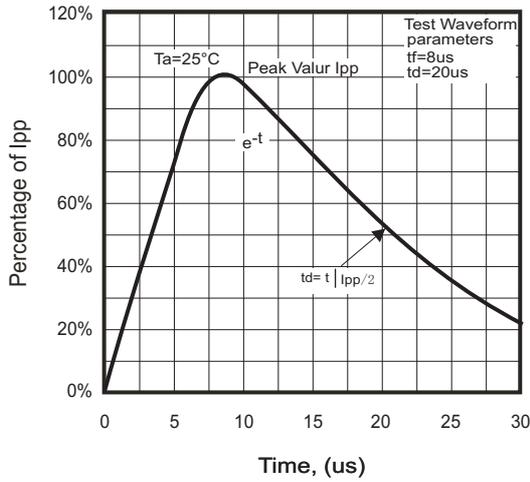


Fig.2 - Power Rating Derating Curve

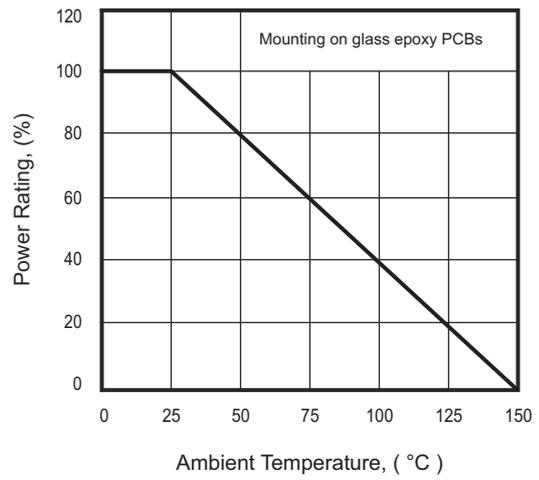


Fig.3 - Clamping Voltage Vs. Peak Pulse Current

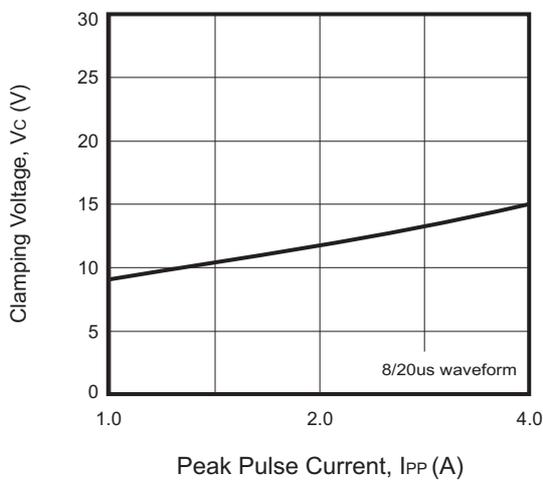


Fig.4 - Forward Voltage vs. Forward Current

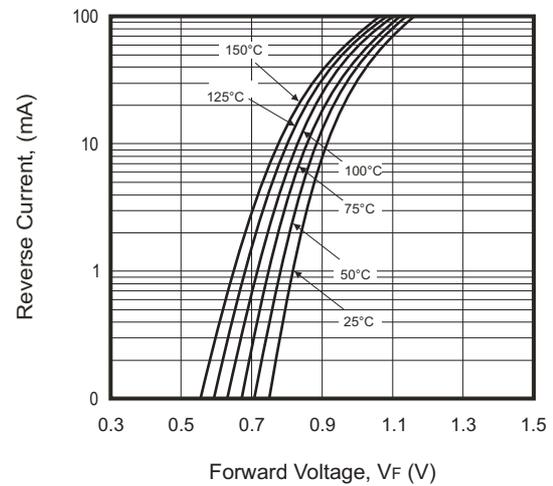
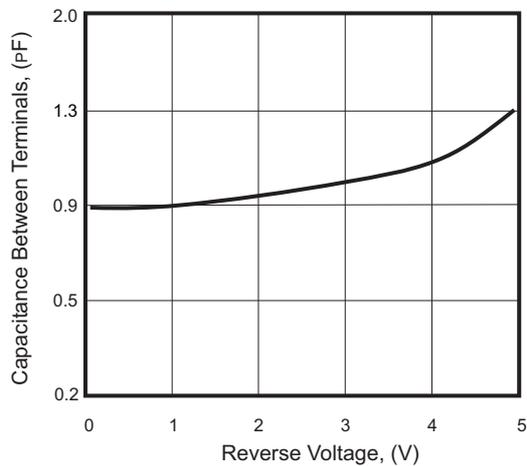
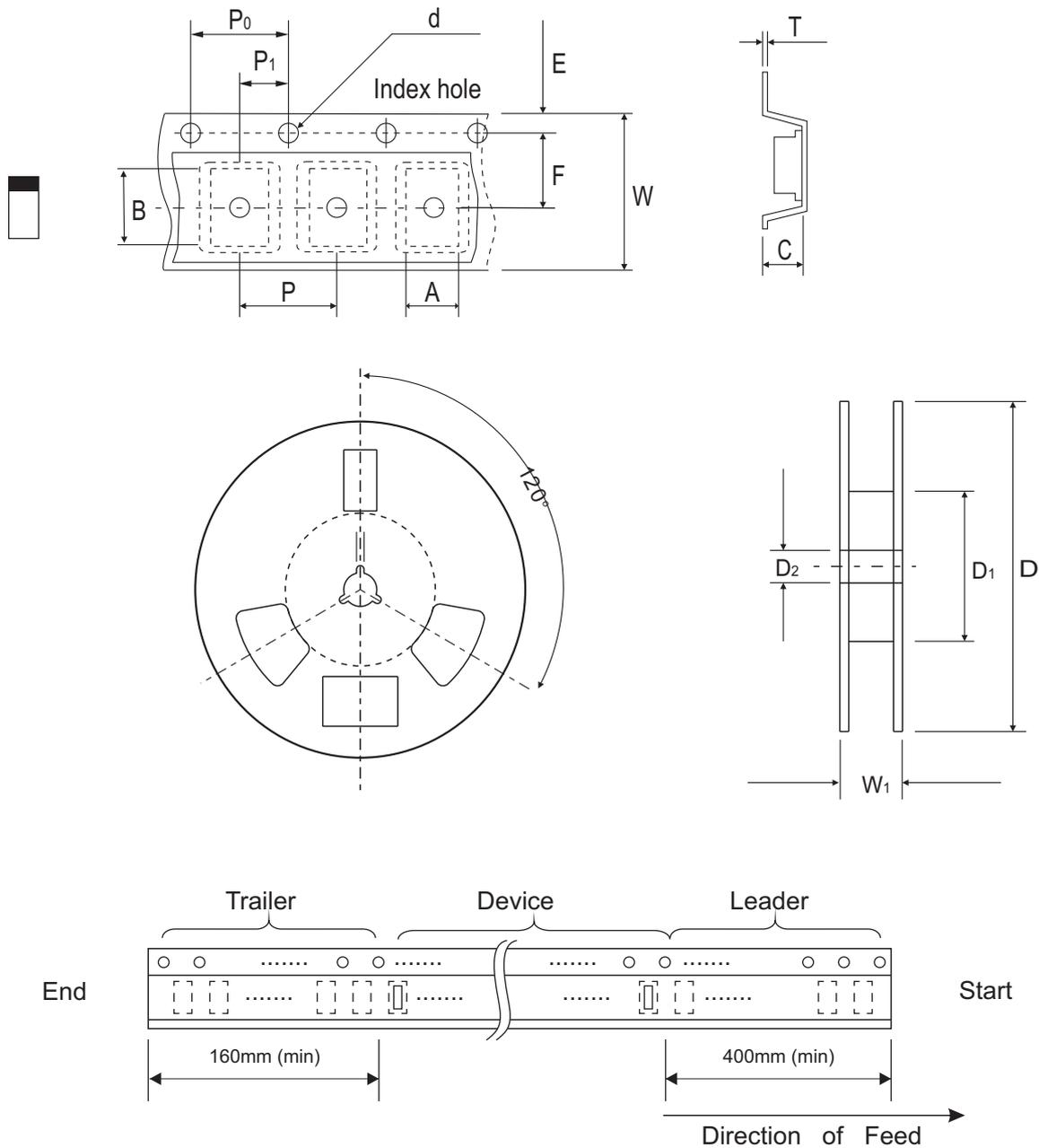


Fig.5 - Typical Capacitance Between Terminals Characteristics



## Reel Taping Specification

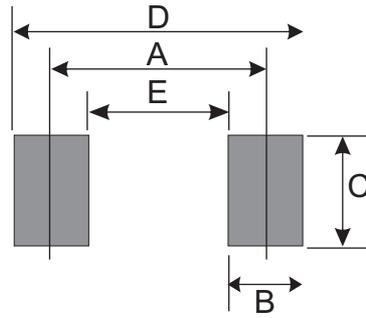


DFN1006-2L	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>
	(mm)	$0.75 \pm 0.05$	$1.17 \pm 0.05$	$0.65 \pm 0.05$	$1.50 + 0.10$ $- 0$	$178.00 \pm 1.00$	$60.00 \pm 0.50$	$13.50 \pm 0.20$
	(inch)	$0.030 \pm 0.002$	$0.046 \pm 0.002$	$0.026 \pm 0.002$	$0.059 + 0.004$ $- 0$	$7.008 \pm 0.039$	$2.362 \pm 0.020$	$0.531 \pm 0.008$

DFN1006-2L	SYMBOL	E	F	P	P <sub>0</sub>	P <sub>1</sub>	T	W	W <sub>1</sub>
	(mm)	$1.75 \pm 0.10$	$3.50 \pm 0.10$	$4.00 \pm 0.10$	$4.00 \pm 0.10$	$2.00 \pm 0.10$	$0.20 + 0.02$ $- 0.05$	$8.00 \pm 0.20$	$12.00 + 0.50$ $- 0$
	(inch)	$0.069 \pm 0.004$	$0.138 \pm 0.004$	$0.157 \pm 0.004$	$0.157 \pm 0.004$	$0.079 \pm 0.004$	$0.008 + 0.001$ $- 0.002$	$0.315 \pm 0.008$	$0.472 + 0.020$ $- 0$

### Suggested PAD Layout

SIZE	DFN1006-2L	
	(mm)	(inch)
<b>A</b>	0.70	0.028
<b>B</b>	0.40	0.016
<b>C</b>	0.60	0.024
<b>D</b>	1.10	0.043
<b>E</b>	0.30	0.012



### Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
<b>DFN1006-2L</b>	<b>10,000</b>	<b>7</b>