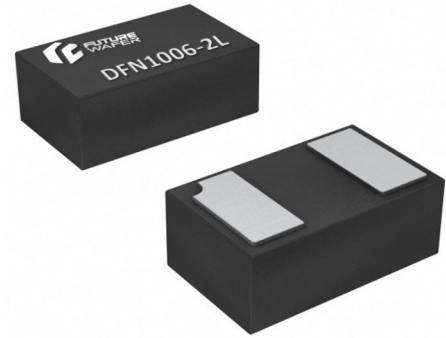
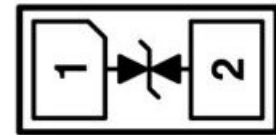


### Applications

- Lan equipment
- Video
- DVI
- High Speed Data Line
- Ethernet
- USB 2.0 Power and Data line Protection



DFN1006-2L



### Feature

- With TVS Diode
- ESD Protection:Level 4
- Low clamping voltage
- 35Watts peak pulse power per line(tp=8/20uS)
- Ultra low capacitance:50pf max.(I/O to GND.)
- Protection one line I/O port

### IEC Compatibility

- EN61000-4
- 61000-4-2(ESD):LEVEL 4,Air:18kv,contact:24kv
- 61000-4-4(EFT):40A-5/50ns
- 61000-4-5(Surge):3A-8/20us

### Mechanical Characteristics

- Molded JEDEC DFN1006 package
- Packaging:Tape and Reel
- Flammability rating UL 94V-0
- Halgen Free

## Device Characteristics

### Maximum Ratings@25 unless otherwise specified

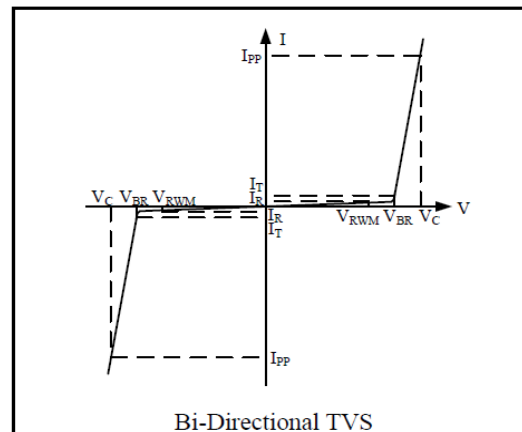
Parameter	Symbol	Value	Units
Peak pulse power (tp=8/20us)	PPP	35	Watts
Operating Temperature	TJ	-55~150	°C
Storage Temperature	TSTG	-65~150	°C

### Electrical Characteristics

Parameter	Symbol	Condition	min	max	Units
Reverse Stand-off Voltage	$V_{RWM}$	Pin 2-1/Pin 1-2		12	V
Reverse Breakdown Voltage	$V_{BR}$	$I_Z=1mA$ Pin 1-2/pin 2-1	13.5	18	V
Reverse Leakage Current	$I_{R(max)}$	@ $V_{RWM}$		0.1	$\mu A$
Forward Voltage	$V_{F(max)}$	$I_F=15mA$		1.15	V
Clamping Voltage	$V_C$	$I_{PP}=1A$ $t_p=8/20\mu s$		25	V
Peak Pulse Current	$I_{PP}$	$t_p=8/20\mu s$		3	A
Junction Capacitance	$C_{I/O}$	Pin capacitance to GND. $V_{dc}=0V, f=1MHz$		50	pf

### I-V Characteristics for a unidirectional Protection Device

Symbol	Parameter
$V_{RWM}$	Nominal Reverse Working Voltage
$I_R$	Reverse Leakage Current @ $V_{RWM}$
$V_{BR}$	Reverse Breakdown Voltage @ $I_T$
$I_T$	Test Current for Reverse Breakdown
$V_C$	Clamping Voltage @ $I_{PP}$
$I_{PP}$	Maximum Peak Pulse Current
$C_{ESD}$	Parasitic Capacitance
$V_R$	Reverse Voltage
$f$	Small Signal Frequency



Bi-Directional TVS

Rating and characteristic curve

FIG 1

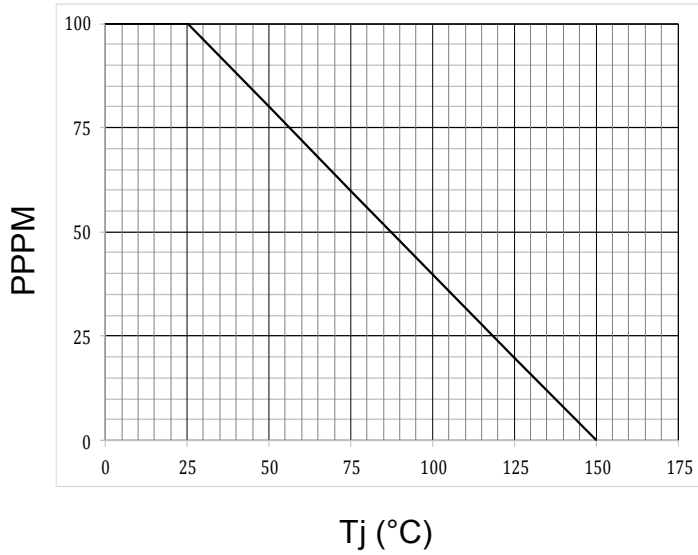
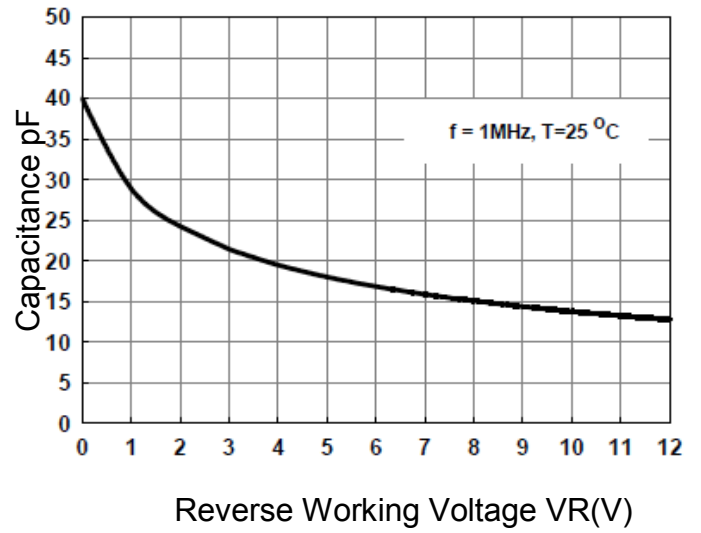


FIG 2.Capacitance



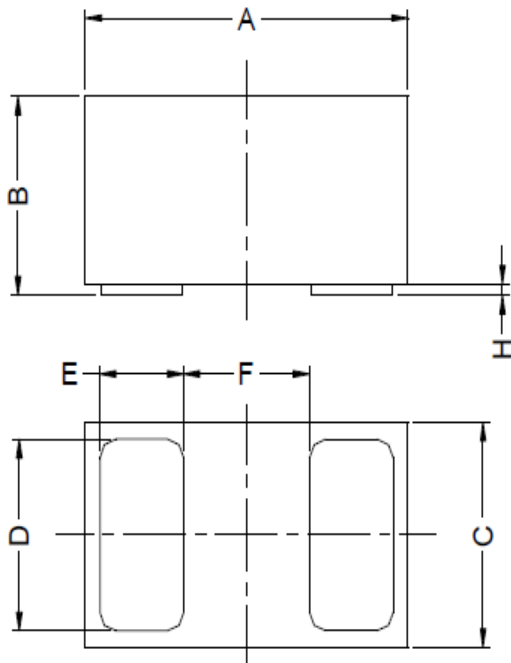
## Ordering information

Marking codes



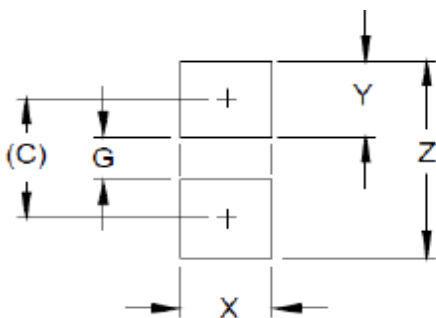
Part No.	Marking
FESD12U	U
Quantity	5,000pcs

## Package information



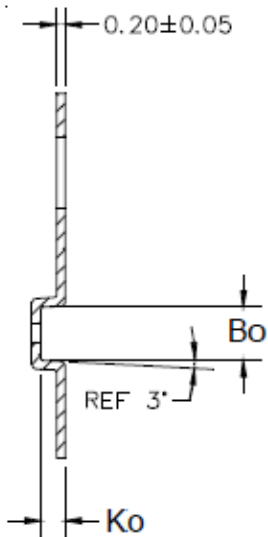
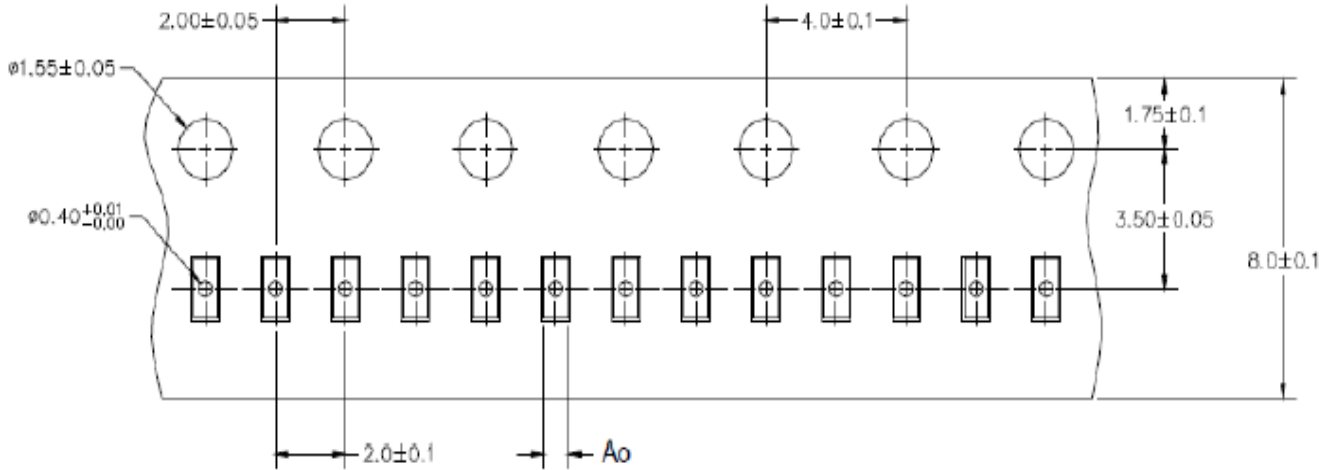
DFN1006-2			
Dim	Min	Typ	Max
A	0.95	1.00	1.075
B	0.47	0.50	0.53
C	0.55	0.60	0.675
D	0.45	0.50	0.55
E	0.20	0.25	0.30
F	-	0.40	-
H	0	0.03	0.05
All Dimensions in mm			

## Pad Layout



DIMENSIONS		
DIM	INCHES	MILLIMETERS
C	(.033)	(0.85)
G	.012	0.30
X	.024	0.60
Y	.022	0.55
Z	.055	1.40

Tape & Reel information



A0	B0	K0
0.69 +/-0.10 mm	1.19 +/-0.10 mm	0.66 +/-0.10 mm

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