

Applications

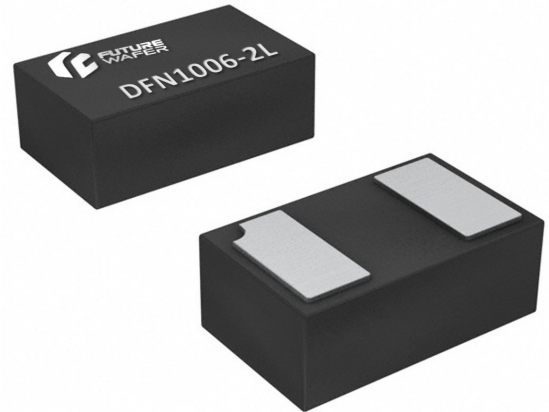
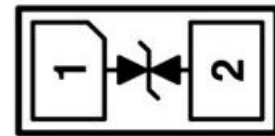
- Lan equipment
- Video
- DVI
- High Speed Data Line
- Ethernet
- USB 3.0 Power and Data line Protection

Feature

- With TVS Diode
- ESD Protection:Level 4
- Low clamping voltage
- 150 Watts peak pulse power per line(tp=8/20uS)
- Ultra low capacitance:0.4pf max.(any I/O to GND.)
- Protection one line I/O port

IEC Compatibility

- EN61000-4
- 61000-4-2(ESD):Level 4,Contact:±8kv,Air::±15kv
- 61000-4-4(EFT):40A-5/50ns
- 61000-4-5(Surge):5A-8/20us


DFN1006-2L

Mechanical Characteristics

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

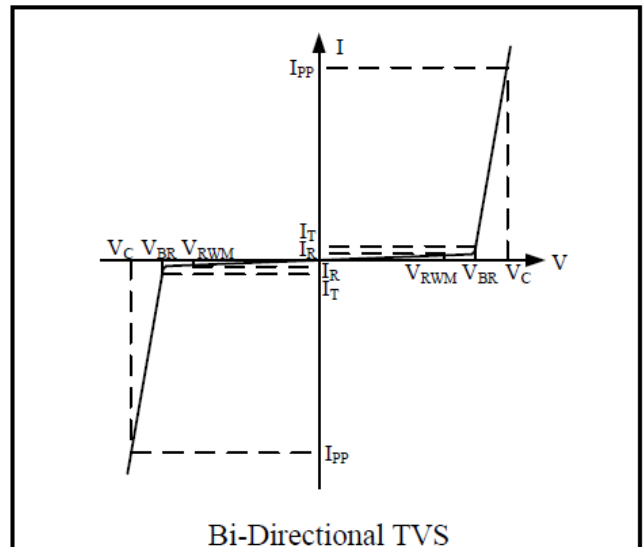
Device Characteristics

Maximum Ratings@25 unless otherwise specified			
Parameter	Symbol	Value	Units
Peak pulse power (tp=8/20us)	PPP	100	Watts
Operating Temperature	TJ	-55~150	°C
Storage Temperature	TSTG	-55~150	°C

Electrical Characteristics

Parameter	Symbol	Condition	min	max	Units
Reverse Stand-off Voltage	V_{RWM}	Pin 2-1/Pin 1-2		5	V
Reverse Breakdown Voltage	V_{BR}	$I_z=1mA, Pin 1-2/pin 2-1$	6.4	9.0	V
Reverse Leakage Current	$I_{R(max)}$	@ V_{RWM}		0.9	μA
Forward Voltage	$V_{F(max)}$	$I_F=15mA$		1.15	V
Clamping Voltage	V_C	$I_{PP}=1A, t_p=8/20\mu s$		15	V
Peak Pulse Current	I_{PP}	$t_p=8/20\mu s$		5	A
Junction Capacitance	C I/O	Pin capacitance to GND. $V_{dc}=0V, f=1MHz$	0.3	0.4	pf

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



Rating and characteristic curve

FIGURE 1
Non-repetitive Peak pulse power V.S pulse time

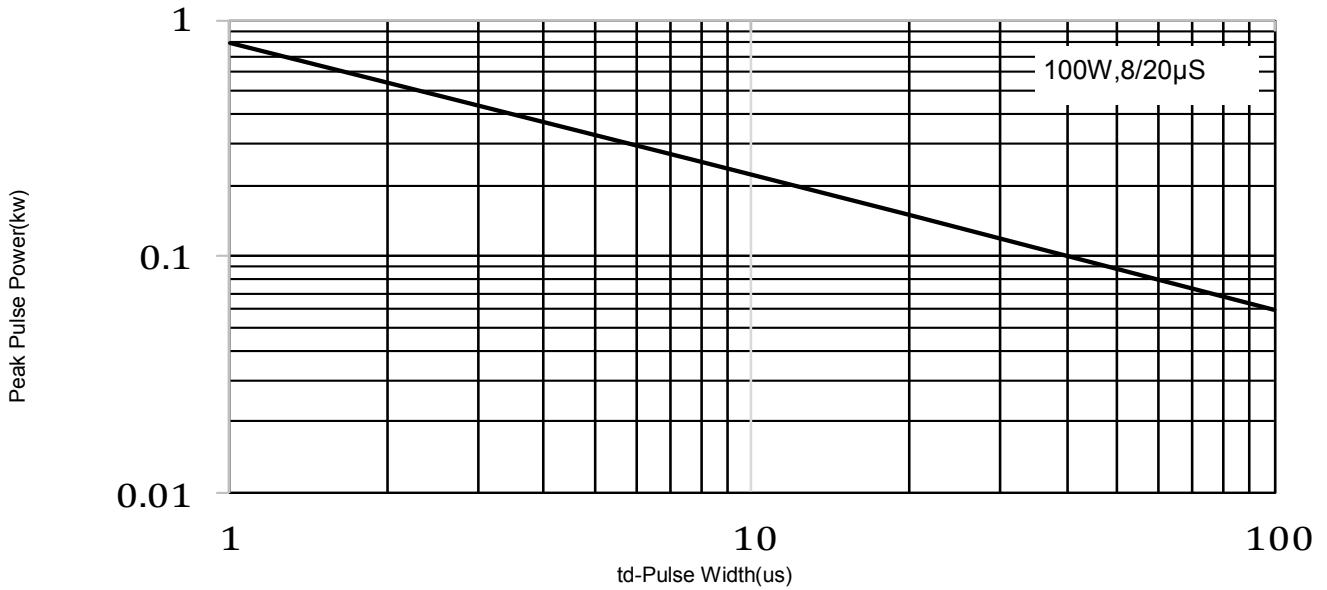


FIGURE 2
Power Derating Curve

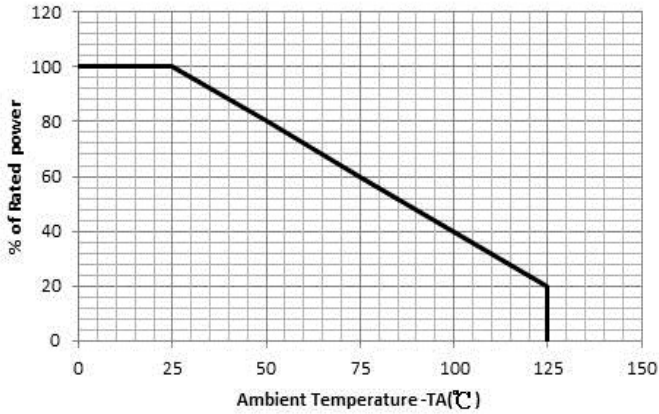


FIGURE 3
Pulse Wave Form

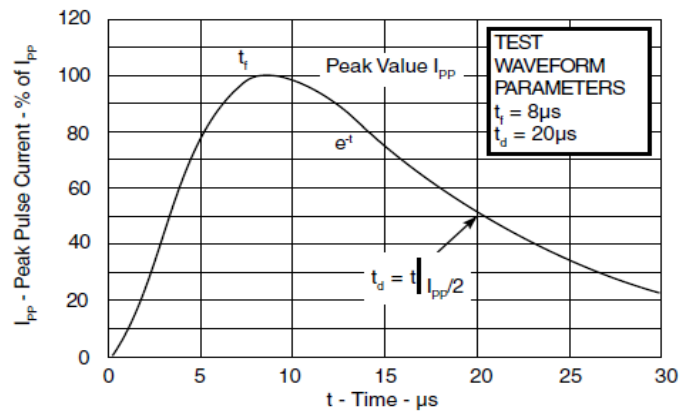


FIGURE 4
Clamping Voltage VC Map

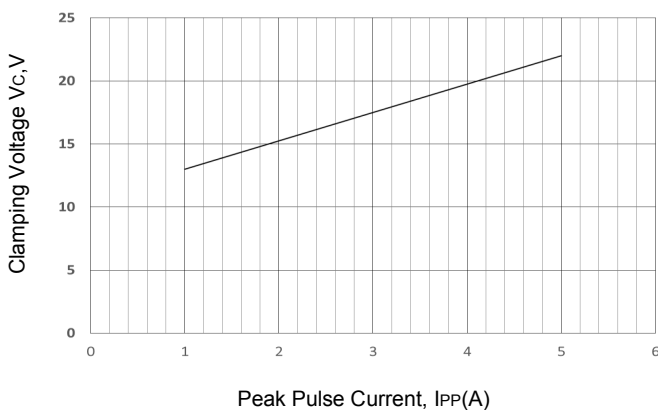
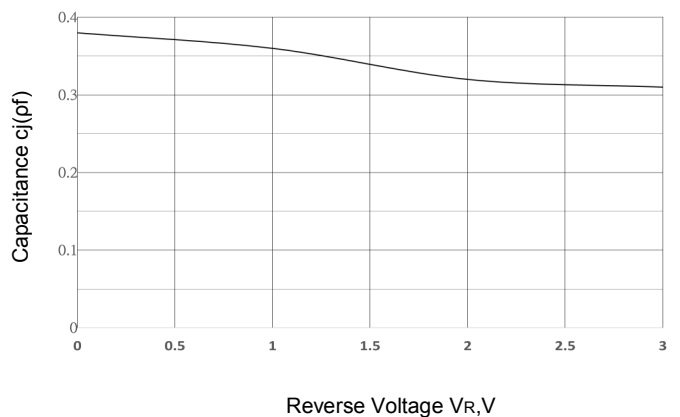
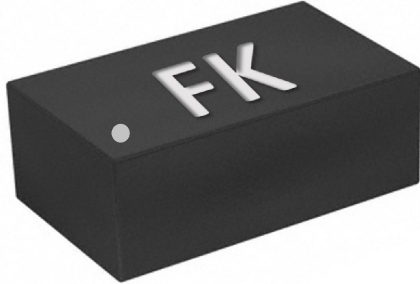


FIGURE 5
Normalized Capacitance vs.Reverse Voltage

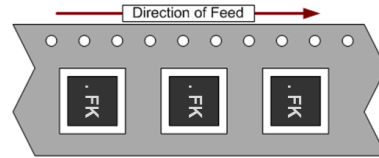


Ordering information

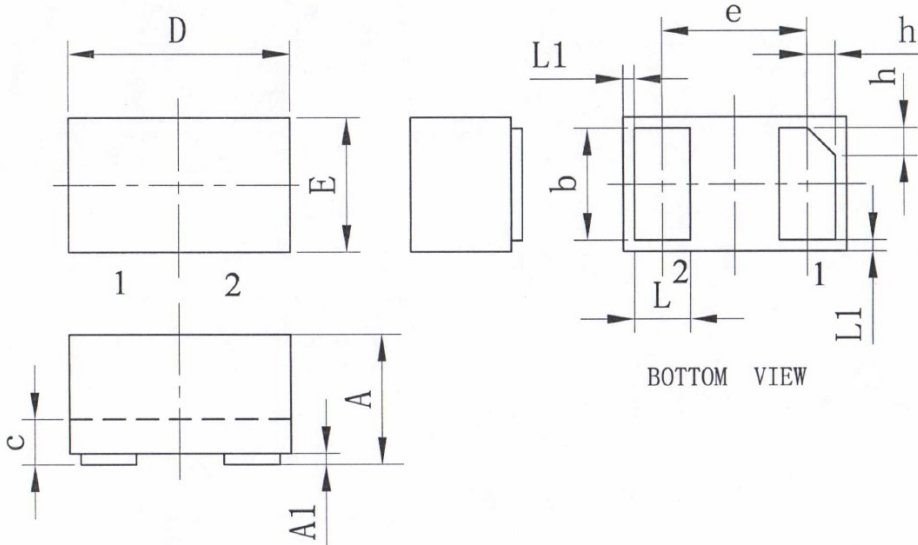
Marking codes



Part No.	Marking
FESD05BLC	FK
Quantity	10,000pcs / 2mm Pitch Reel



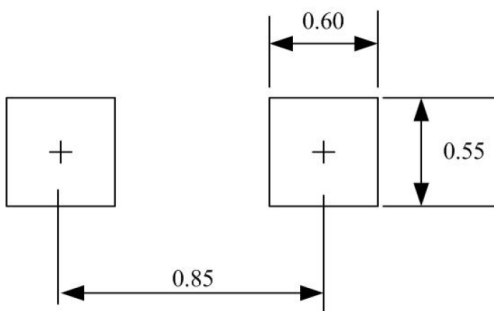
Package information



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.45	0.50	0.55
A1	0.00	0.02	0.05
b	0.45	0.50	0.55
c	0.12	0.15	0.18
D	0.95	1.00	1.05
e	0.65BSC		
E	0.55	0.60	0.65
L	0.20	0.25	0.30
L1	0.05REF		
h	0.07	0.12	0.17
載體尺寸 Mil	20*20		

Unit: mm

Pad Layout



Futurewafer Technology co.,Ltd 台灣未來芯航電股份有限公司

Tel : +886-3-3573583

Futurewafer.com.tw

桃園市桃園區中正路 987 巷 50 弄 2 號

