BLC03CX

Single Line TVS for ESD Protection Device in Portable Electronics

Applications

- Personnal Digital Assistance
- Wireless System
- Cellular Phones
- Desktops and servers
- Pagers
- Peripherals

Feature

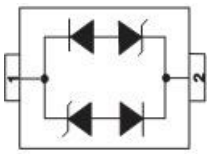
- Bi-directional configurations
- ESD Protection:IEC61000-4-2:±30kv(Contact)
- Low clamping voltage
- 350 Watts peak pulse power per line(tp=8/20uS)
- Working voltages:3.3V
- Protection one power line or I/O port

IEC Compatibility

- EN61000-4
- 61000-4-2(ESD):Level 4,Contact:±30kv
- 61000-4-4(EFT):40A-5/50ns
- 61000-4-5(Surge):20A(3V),8/20us



SOD323



Mechanical Characteristics

- Molded JEDEC SOD-323
- Weight 5 milligrams
- Flammability rating UL 94V-0
- Halogen Free

Device Characteristics

Maximum Ratings@25 unless otherwise specified			
Parameter	Symbol	Value	Units
Peak pulse power (tp=8/20us) see fig 1.	P_{PP}	350	Watts
ESD Voltage (HBM Waveform per IEC 61000-4-2)	V_{ESD}	30	KV
Operating Temperature	T_J	-55~150	°C
Storage Temperature	T_{STG}	-55~150	°C

Electrical Characteristics

Parameter	Symbol	Condition	min	max	Units
Reverse Stand-off Voltage	V_{RWM}	Pin 2-1/Pin 1-2		3.3	V
Reverse Breakdown Voltage	V_{BR}	I_Z=1mA,Pin 1-2/pin 2-1	4.0		V
Reverse Leakage Current	$I_{R(max)}$	@V_{RWM}		0.1	uA
Clamping Voltage	V_C	I_{PP}=1A tp=8/20us		8	V
Peak Pulse Current	I_{PP}	tp=8/20us		20	A
Junction Capacitance	$C_{I/O}$	Pin capacitance Pin to Pin. Vdc=0V,f=1MHZ		1.5	pf

Rating and characteristic curve

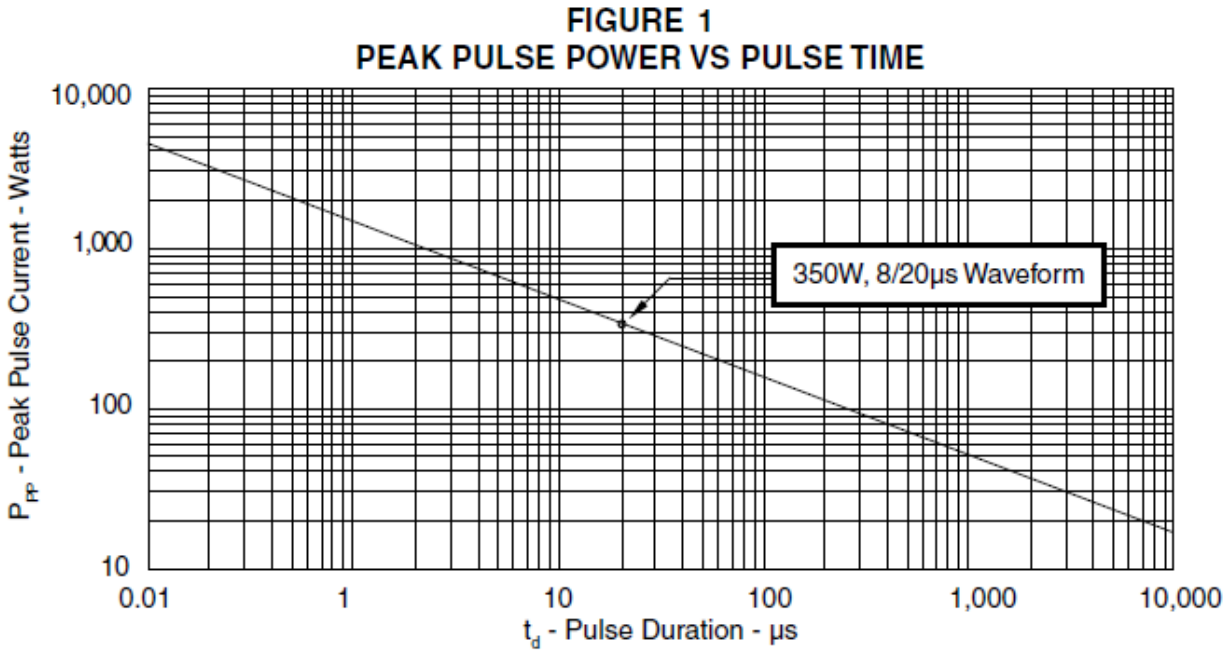


FIGURE 2
Normalized Capacitance vs.Reverse Voltage

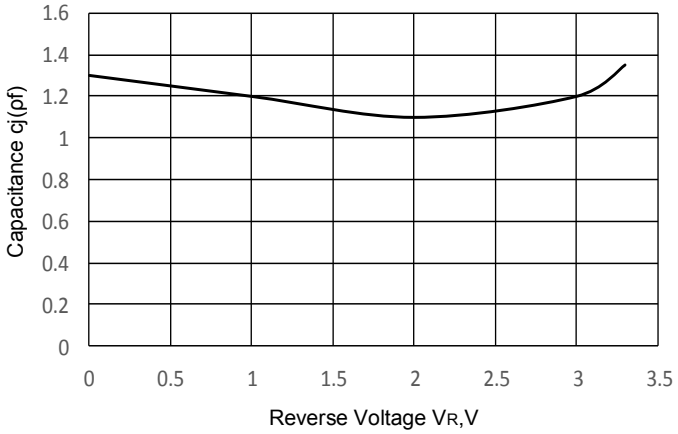


FIGURE 3
Clamping Voltage VC Map

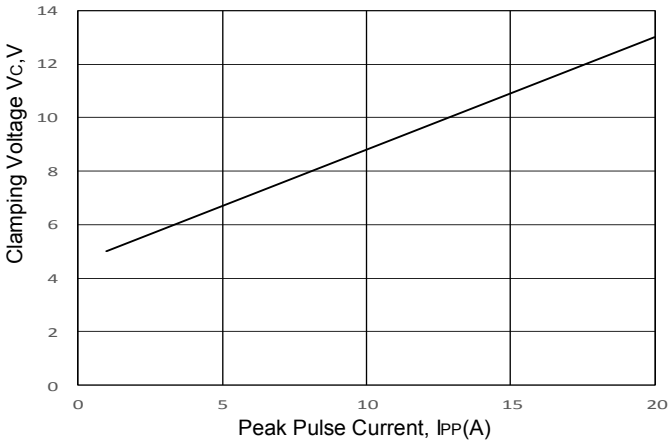


FIGURE 4
Power Derating Curve

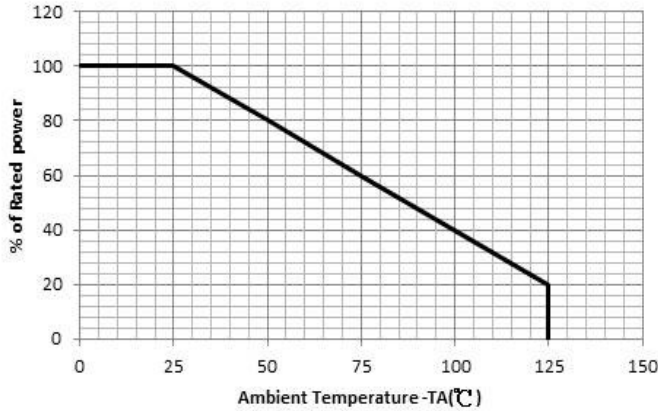
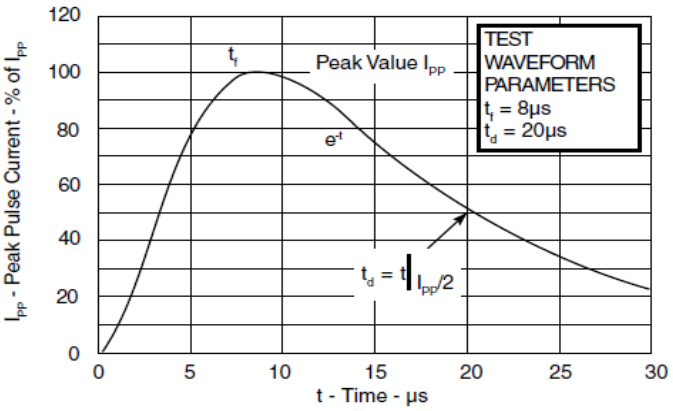
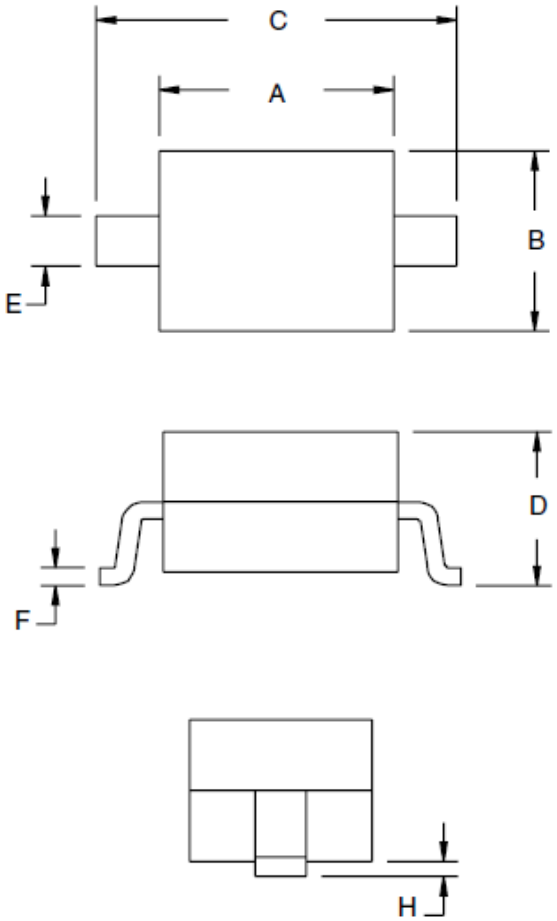


FIGURE 5
Pulse Wave Form

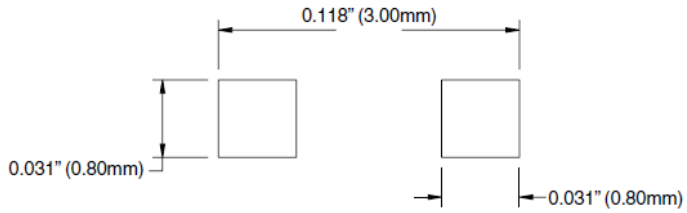


Package information



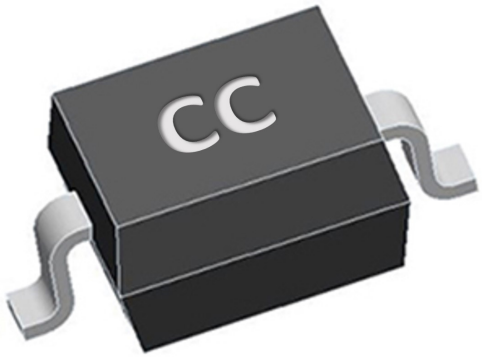
Package dimensions				
DIM	Millmeters		Inchs	
	Min	Max	Min	Max
A	1.60	1.90	0.063	0.075
B	1.15	1.45	0.045	0.057
C	2.39	2.70	0.094	0.106
D	0.92	1.10	0.036	0.043
E	0.25	0.40	0.010	0.016
F	0.10	0.20	0.004	0.008
H		0.10		0.004

Mounting pad



Ordering information

Marking code



Part No.	Package	Marking	Shipping	Reel Size
BLC03CX	SOD-323	CC	3,000/ Tape@Reel	7”

Futurewafer Technology co.,Ltd 台灣未來芯航電股份有限公司
Tel ：+886-3-3573583/Tel ：+886-3-3574065
Futurewafer.com.tw
桃園市桃園區中正路 987 巷 50 弄 2 號