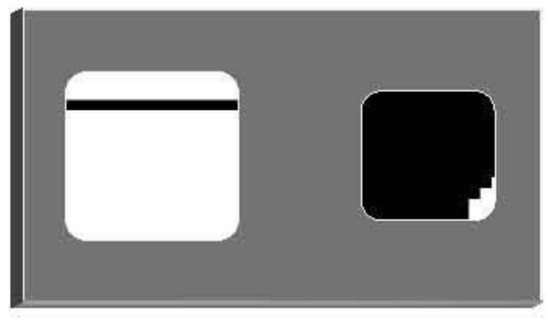
Features

- Protects one I/O or power line
- Completely compatible SOD923
- Low Clamping Voltage
- Working Voltage: 5V
- Low Leakage Current
- Response Time is Typically < 1 ns



FBP2C
(Bottom View)

IEC COMPATIBILITY (EN61000-4)

- **IEC 61000-4-2 (ESD) ±15kV (air), ±8kV (contact)**
- **IEC 61000-4-4 (EFT) 40A (5/50ns)**

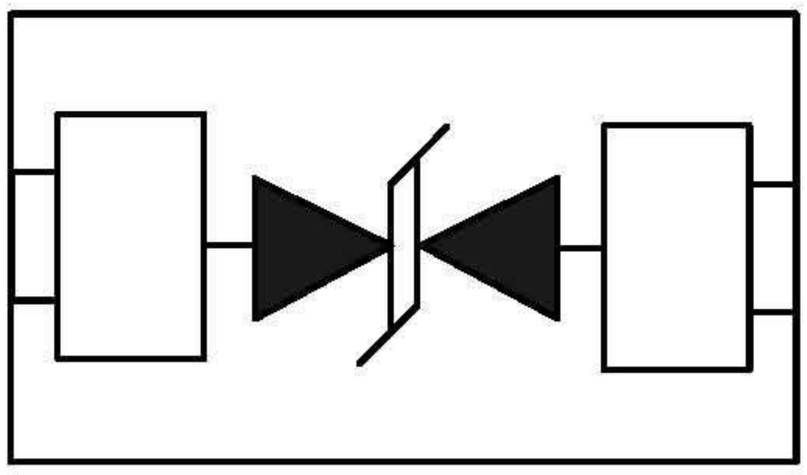
Mechanical Characteristics

- JEDEC FBP2C package
- Molding compound flammability rating: UL 94V-0
- Marking : Marking Code
- RoHS Compliant

Applications

- Cellular Handsets & Accessories
- Personal Digital Assistants (PDAs)
- Notebooks & Handhelds
- Portable Instrumentation
- Digital Cameras
- MP3 Players

Schematic & PIN Configuration

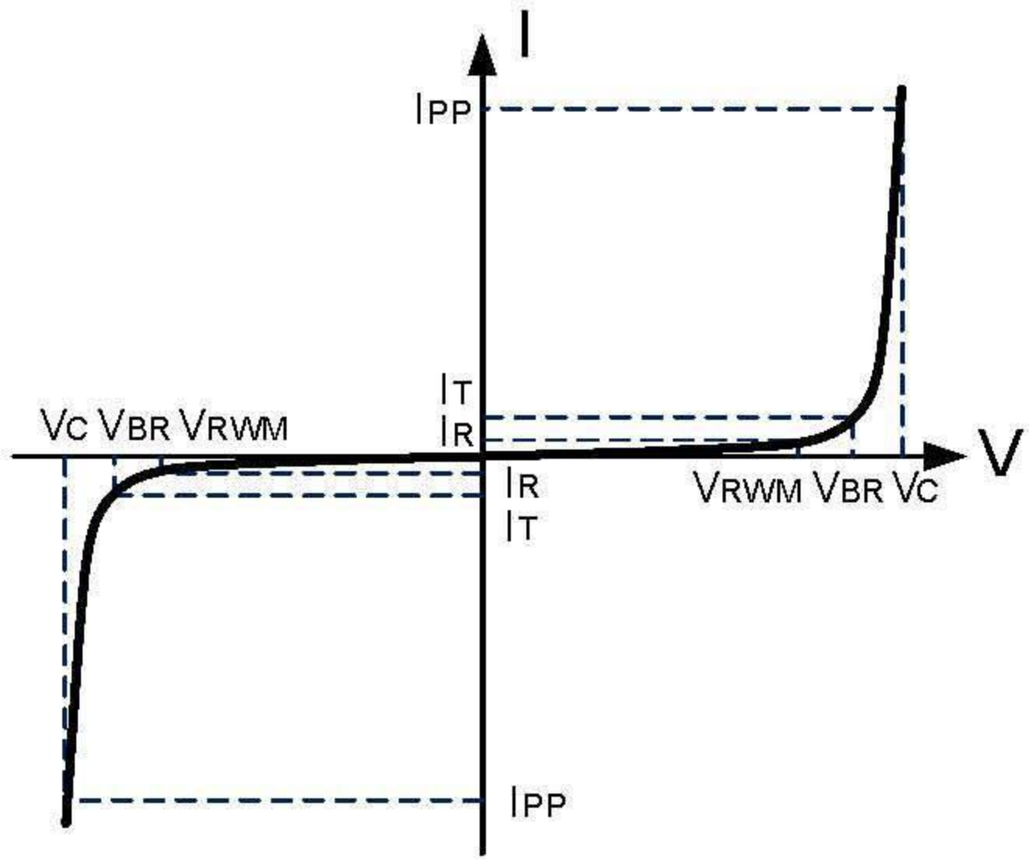


Bidirectional

Absolute Maximum Rating			
Rating	**Symbol**	**Value**	**Units**
Peak Pulse Power (t_p = 8/20μs)	P_{PP}	100	Watts
Peak Forward Voltage (I_F = 1A, t_p = 8/20μs)	V_{FP}	1.5	V
Operating Temperature	T_J	-55 to + 125	℃
Storage Temperature	T_{STG}	-55 to +150	℃

Electrical Parameters (T=25℃)

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_F	Forward Current
V_F	Forward Voltage @ I_F



Electrical Characteristics

ESDALC6V1						
Parameter	**Symbol**	**Conditions**	**Minimum**	**Typical**	**Maximum**	**Units**
Reverse Stand-Off Voltage	V_{RWM}				5.0	V
Reverse Breakdown Voltage	V_{BR}	I_T=1mA	6. 2		7. 1	V
Reverse Leakage Current	I_R	V_{RWM}=5V, T=25℃			1	μA
Peak Pulse Current	I_{PP}	t_p =8/20μs			4	A
Clamping Voltage	V_C	I_{PP}=1A, t_p=8/20μs			9.5	V
Clamping Voltage	V_C	I_{PP}=4A, t_p=8/20μs		14.5	17	V
Junction Capacitance	C_j	V_R =0V, f =1MHz		3		pF

Typical Characteristics

Figure 1: Peak Pulse Power Vs Pulse Time

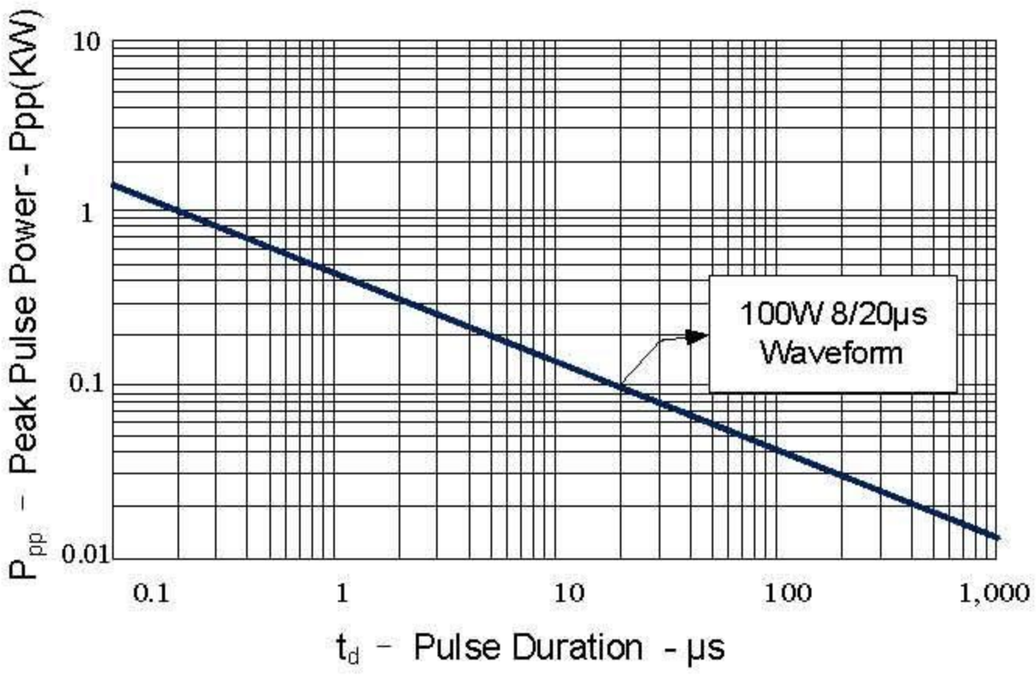


Figure 2: Power Derating Curve

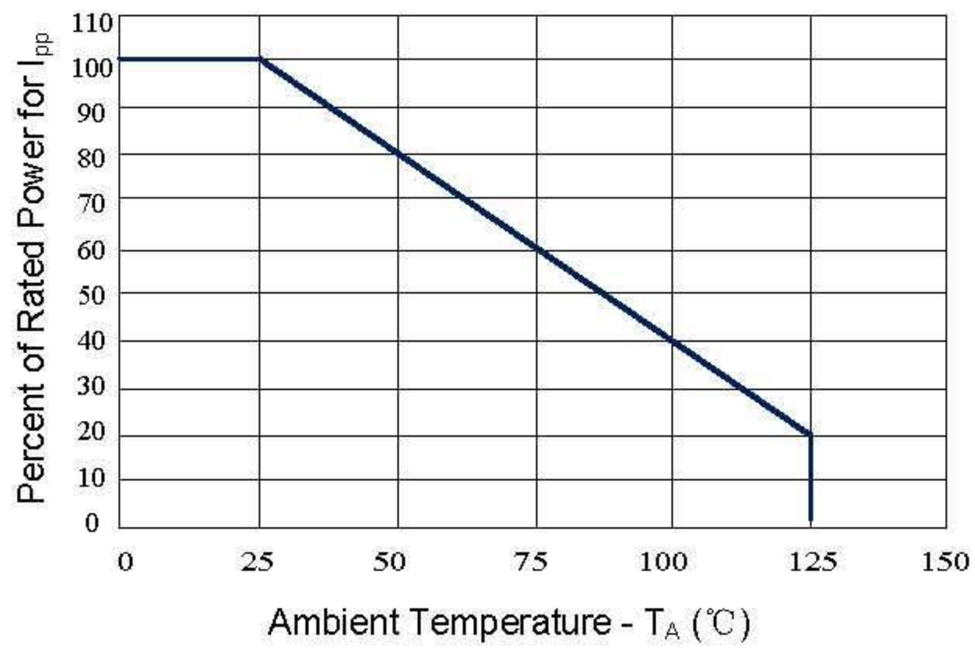


Figure 3: Clamping Voltage vs. Peak Pulse Current

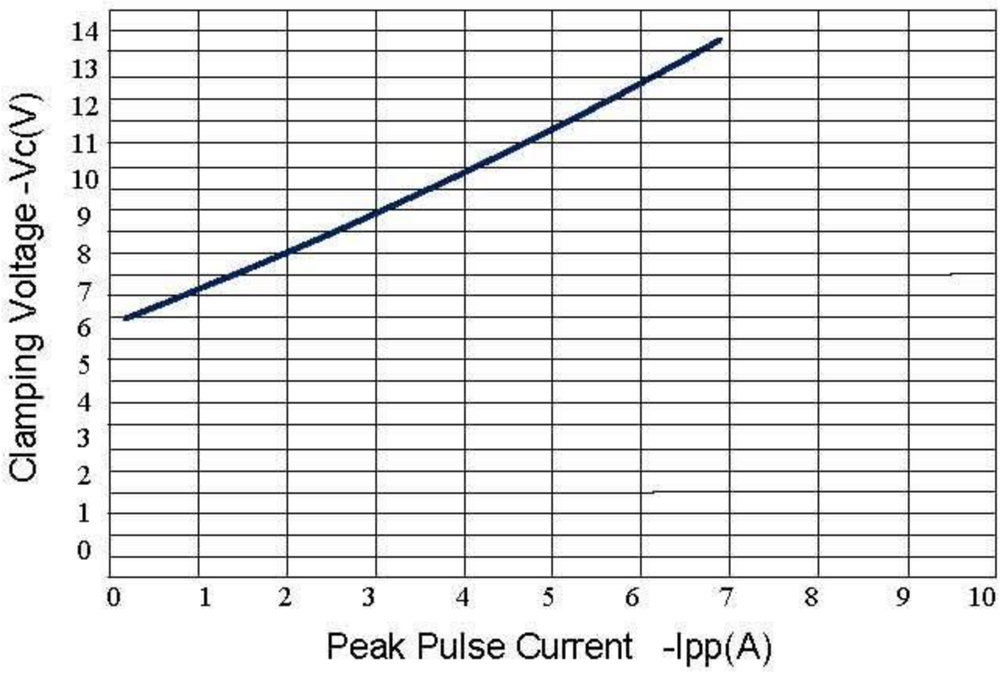


Figure 4: Normalized Junction Capacitance vs. Reverse Voltage

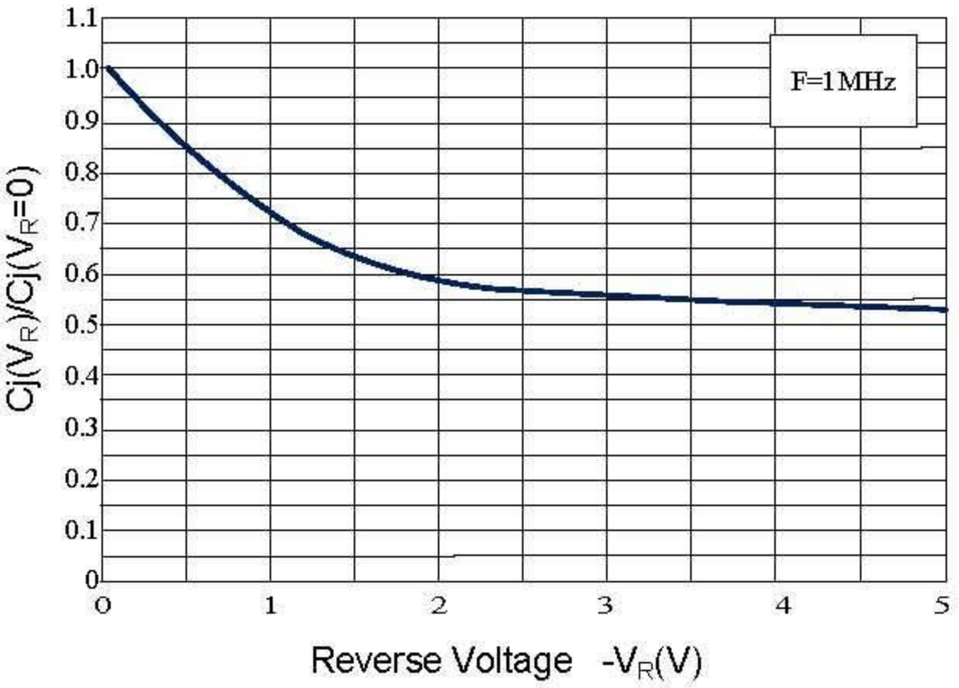
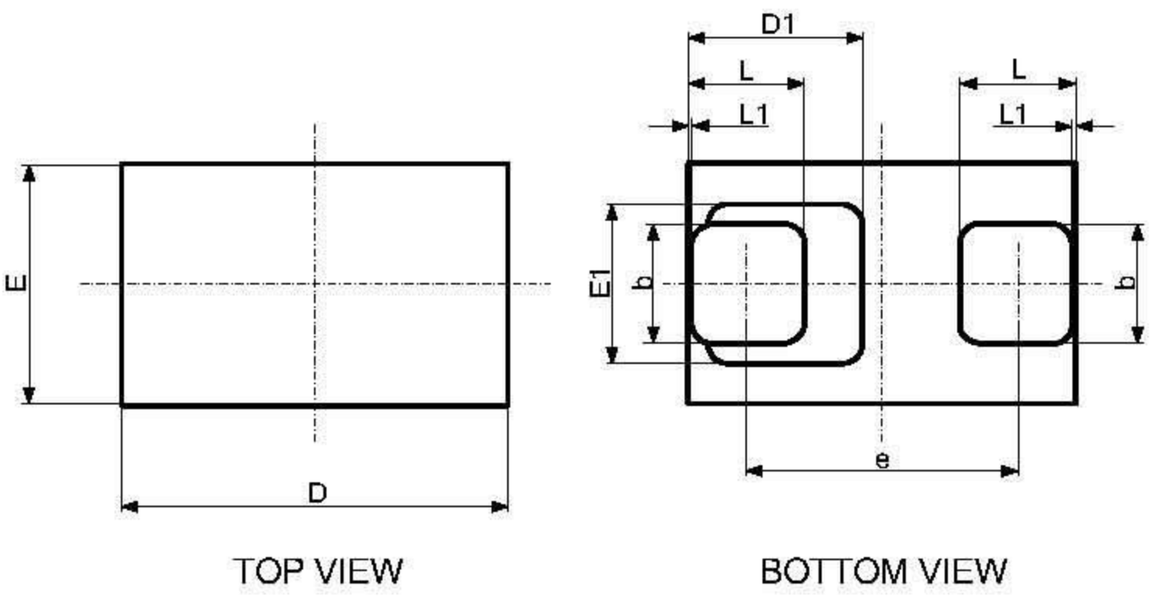


Figure 5: Pulse Waveform

Figure 6: ESD Clamping(8kV Contact per IEC 61000-4-2)

Outline Drawing – FBP2C

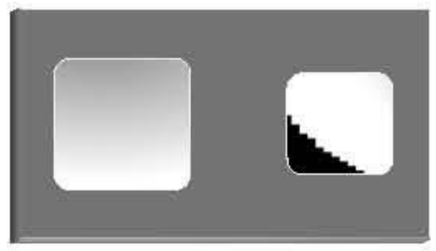
PACKAGE OUTLINE



TOP VIEW

BOTTOM VIEW

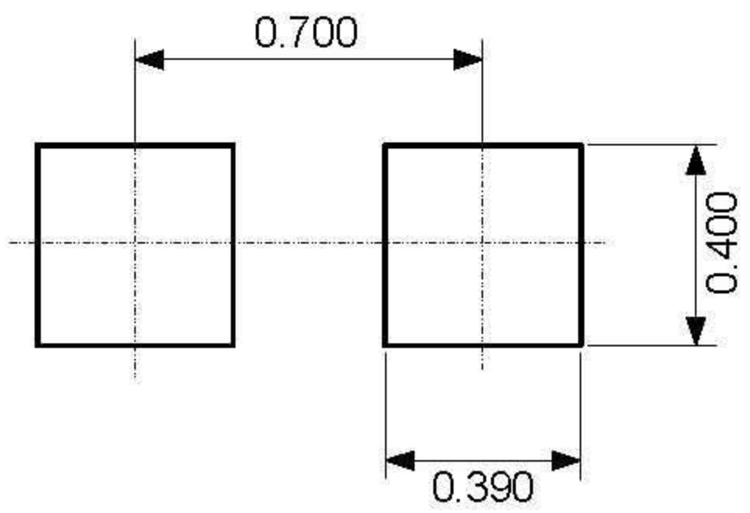
SIDE VIEW



DIMENSIONS

YMB L	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.450	0.550	0.018	0.022
A1	0.010	0.090	0.000	0.004
D	0.950	1.050	0.037	0.041
E	0.550	0.650	0.022	0.026
D1	0.450 REF		0.017 REF	
E1	0.400 REF		0.016 REF	
b	0.250	0.350	0.010	0.014
e	0.650	0.750	0.026	0.030
L	0.250	0.350	0.010	0.014
L1	0.010 REF		0.000 REF	

Land Pattern



Marking Codes

Part Number	ESDALC6V1	Marking Code	PB