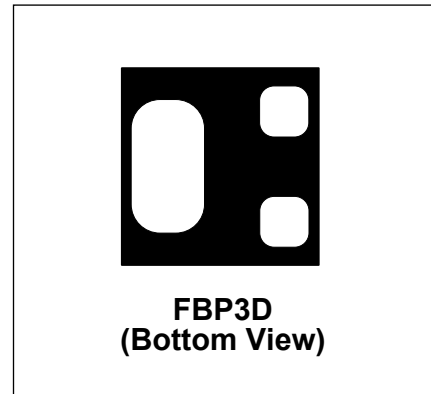


WE05M02B1-B

Transient Voltage Suppressor

Features

- Small Body Outline Dimensions:
0.037" x 0.037" (0.95mm x 0.95 mm)
- Low Body Height: 0.019" (0.50 mm) Max
- Protects one I/O or power line
- Working Voltage: 5 V
- Low Leakage Current
- Response Time is Typically < 1 ns



IEC COMPATIBILITY (EN61000-4)

- IEC 61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)

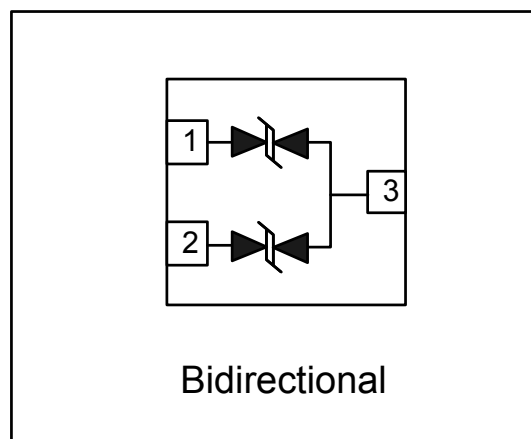
Mechanical Characteristics

- JEDEC FBP3D package
- Molding compound flammability rating:
UL 94V-0
- Marking: Marking Code
- Packaging: Tape and Reel per EIA 481
- RoHS/WEEE Compliant

Applications

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

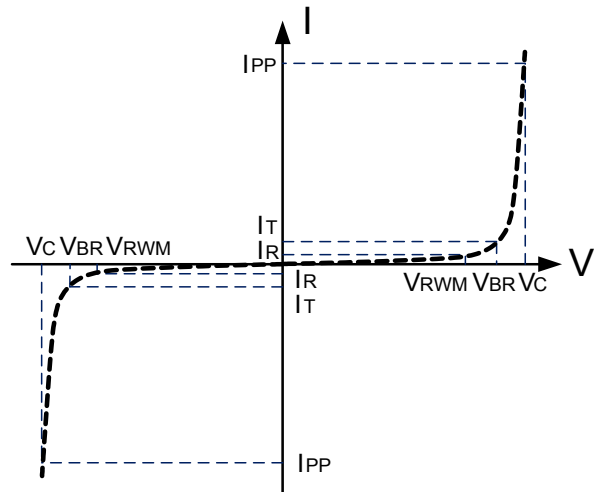
Schematic & PIN Configuration



Absolute Maximum Rating			
Rating	Symbol	Value	Units
Peak Pulse Power @ 8/20µs	P _{PP}	25	W
Electrostatic discharge Voltage (See Note1,2)	V _{ESD}	8KV (contact)	V
		15KV (air)	
Operating Temperature	T _J	-55 to + 150	°C
Storage Temperature	T _{STG}	-55 to +150	°C

Electrical Parameters (T=25°C)

Symbol	Parameter
V _{RWM}	Working Peak Reverse Voltage
I _R	Maximum Reverse Leakage Current @ V _{RWM}
V _{BR}	Breakdown Voltage @ I _T
I _T	Test Current



Electrical Characteristics

WE05M02B1-B						
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V _{RWM}				5.0	V
Reverse Breakdown Voltage	V _{BR}	I _T =1mA	6.0			V
Reverse Leakage Current	I _R	V _{RWM} =5V, T=25°C			1	µA
Junction Capacitance	C _j	V _R = 0V, f = 1MHz		2.5		pF
Clamping Voltage (See Note3)	V _C	8KV (contact)	See Figure 3.			V

Note1: ESD Pulse Waveform according to IEC 61000-4-2, see Table1 and Figure1.

Note2: ESD Clamping Voltage see Figure2 and 3.

Note3: The clamping Voltage data is taken with a 100x attenuator.

Typical Characteristics

Table 1. IEC 61000-4-2 Discharge Parameters

Level	First Peak Current (A)	Peak Current at 30 ns (A)	Peak Current at 60 ns (A)	Test Voltage (Contact Discharge) (kV)	Test Voltage (Air Discharge) (kV)
1	7.5	4	2	2	2
2	15	8	4	4	4
3	22.5	12	6	6	8
4	30	16	8	8	15

Figure 1. IEC 61000-4-2 Waveform

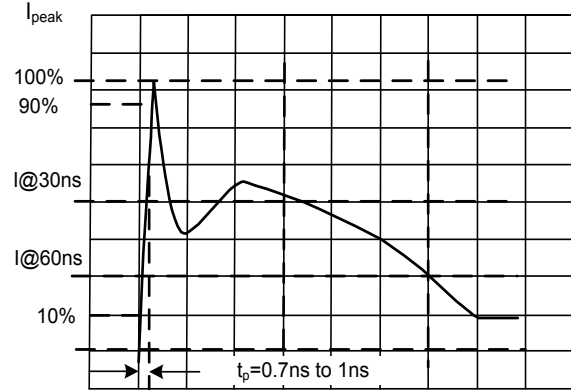


Figure 2. ESD Clamping Voltage Screenshot Positive 8 kV contact per IEC 61000-4-2

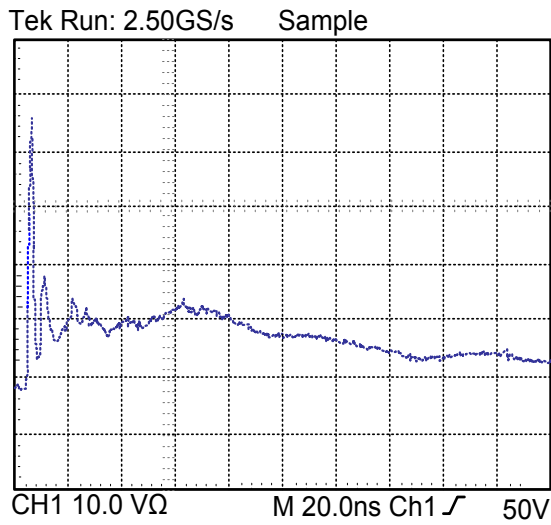
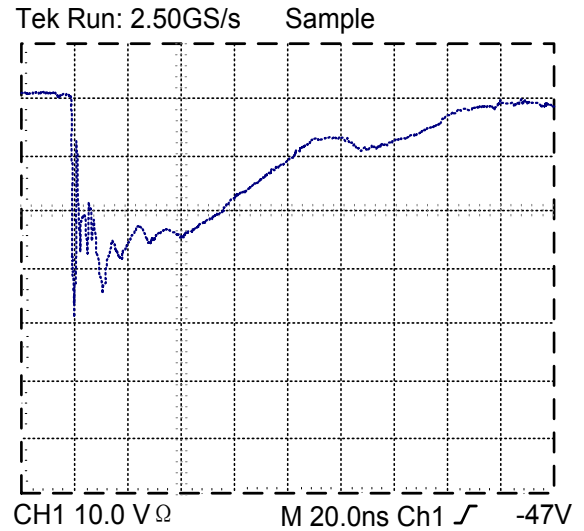
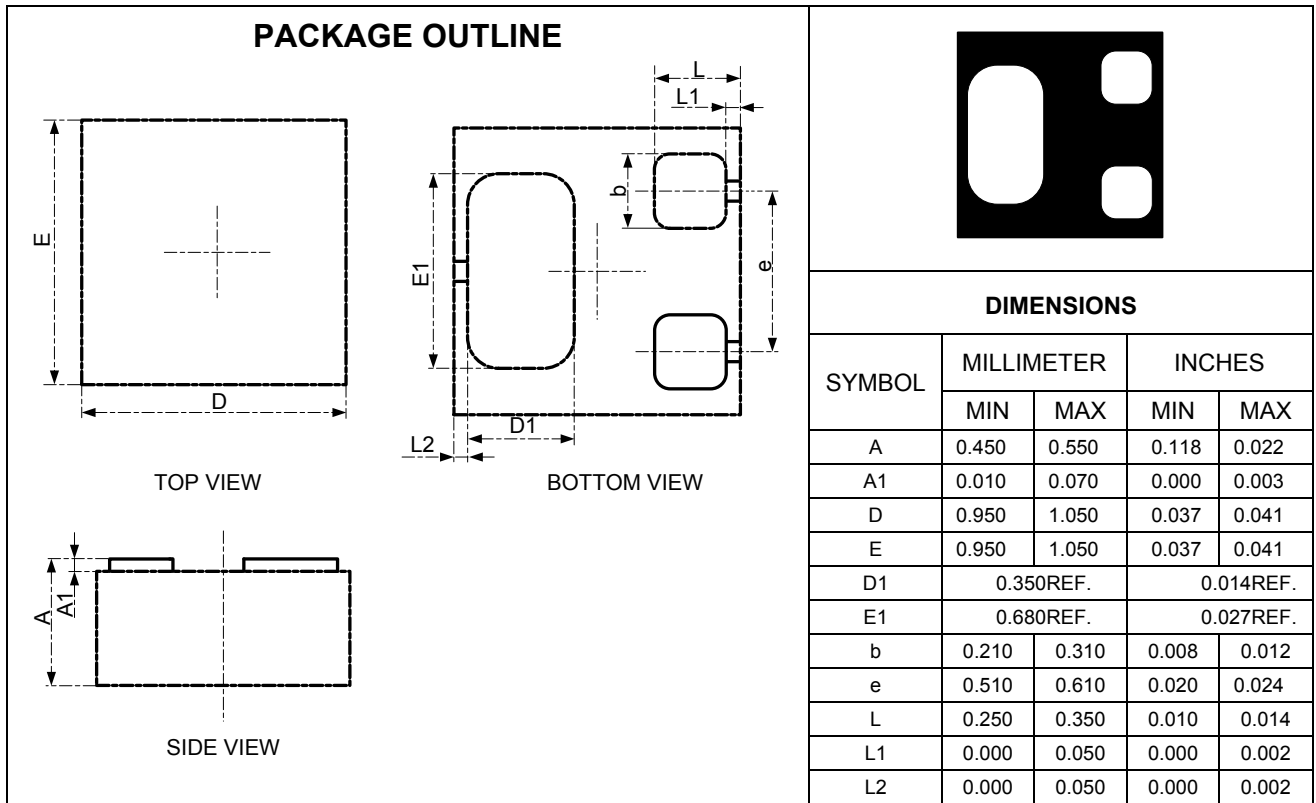


Figure 3. ESD Clamping Voltage Screenshot Negative 8 kV contact per IEC 61000-4-2



Outline Drawing – FBP3D



Marking Codes

Part Number	WE05M02B1-B
Marking Code	