

1.0 x 0.5mm SMD SURGE PROTECTOR

ABSP10



RoHS
Compliant



1.0 x 0.5 x 0.4mm

FEATURES:

- Outstanding ESD protection
- Very low leakage current
- Bi-directional
- Extremely low capacitance for high speed data transmission applications

APPLICATIONS:

- High speed data ports
- USB 2.0
- IEEE 1394
- HDMI
- DVI
- High speed ethernet

STANDARD SPECIFICATIONS:

ABRACON P/N:	ABSP10
Operating Temperature:	-55 °C to +125 °C
Storage Temperature:	-40 °C to +85 °C

Capacitance	Leakage Current	Peak Voltage	Clamping Voltage	Rated Voltage
0.15pF typ. 0.25pF max.	1μA max.	500V typ.	30V typ. 100V max.	D.C. 12V

Capacitance:	The capacitance value shall be measured under the conditions specified below: Frequency: 1MHz±10%, Voltage: 1Vrms±0.2Vrms, Temperature: 25°C±2°C
Leakage Current:	The leakage current value shall be measured under the conditions specified below: Voltage: 6Vdc, Temperature: 25°C±2°C
Peak Voltage:	The peak voltage value shall be measured under the following conditions: ESD test conditions: IEC61000-4-2, 8kV contact discharge.
Clamping Voltage:	The clamping voltage value shall be measured at 30ns after initiation of pulse and measured under the conditions specified below: ESD test conditions: IEC61000-4-2, 8kV contact discharge.

ELECTRICAL PERFORMANCE:

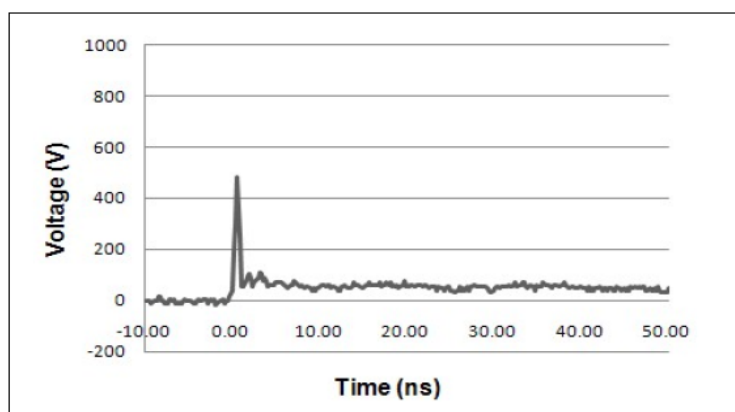


Figure 1. ESD Suppression Voltage Waveform

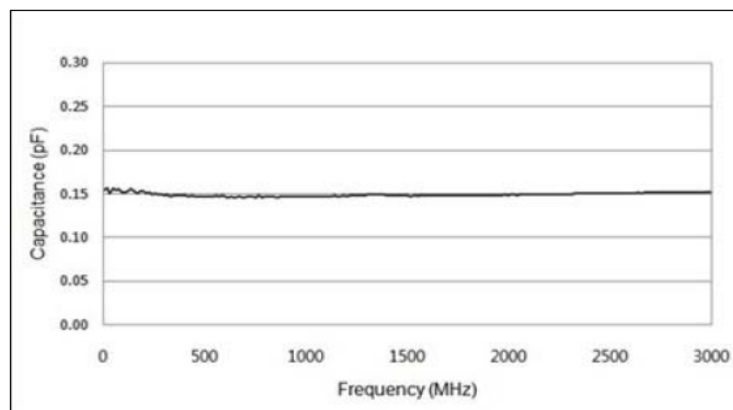


Figure 2. Capacitance



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ELECTRICAL PERFORMANCE: - continued:

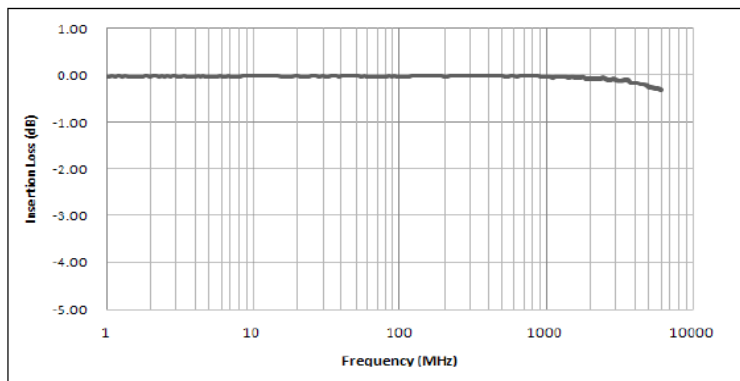


Figure 3. Insertion Loss Diagram

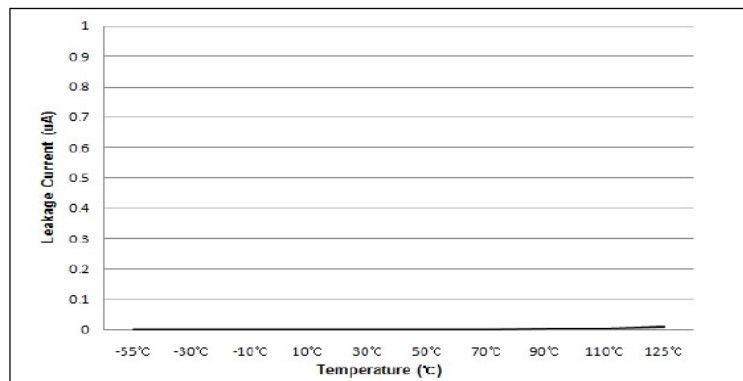


Figure 4. Change in Leakage Current according to temperature

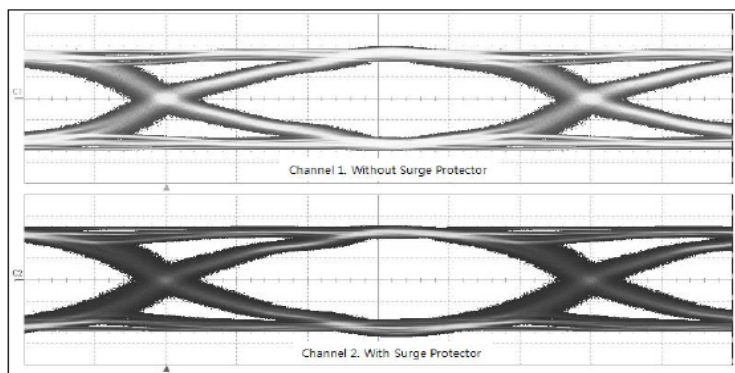


Figure 5. Eye Diagram

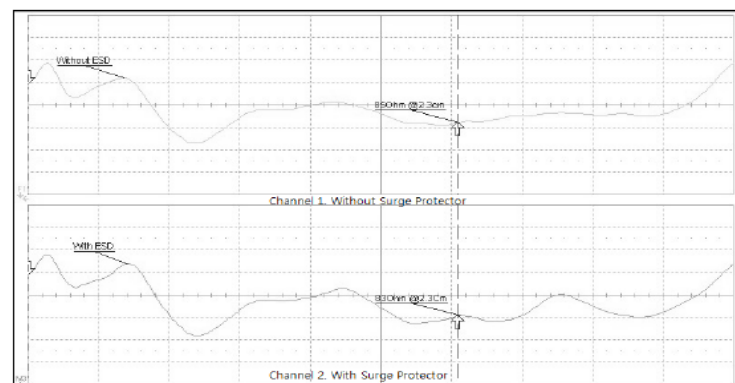


Figure 6. TDR Test Result

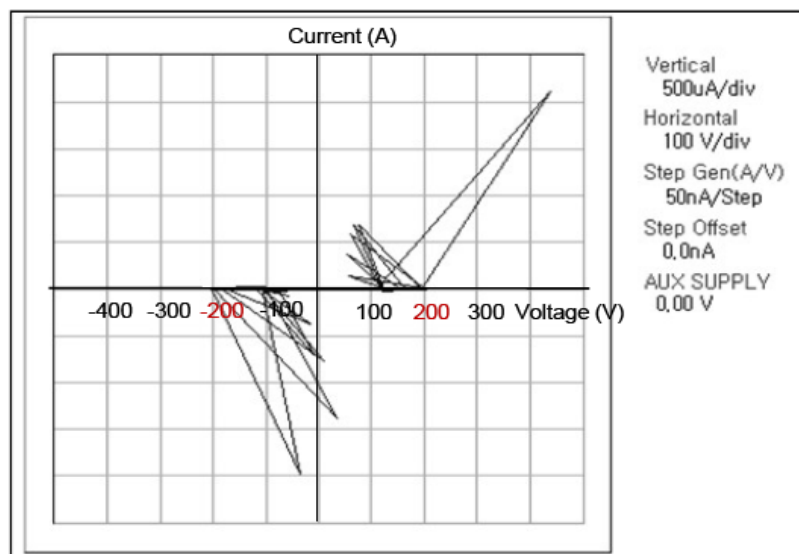


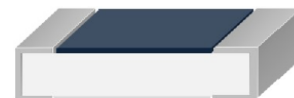
Figure 7. I-V Curve Characteristics

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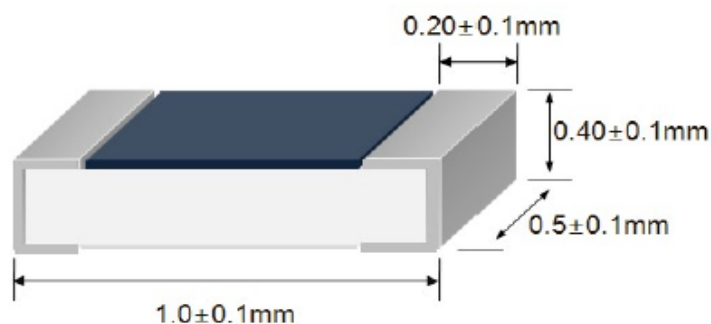


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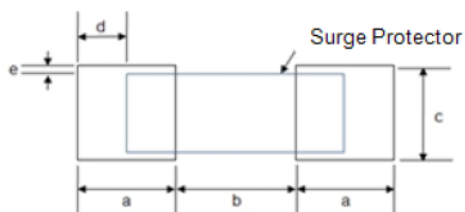


1.0 x 0.5 x 0.4mm

OUTLINE DRAWING:



Recommended Land Pattern

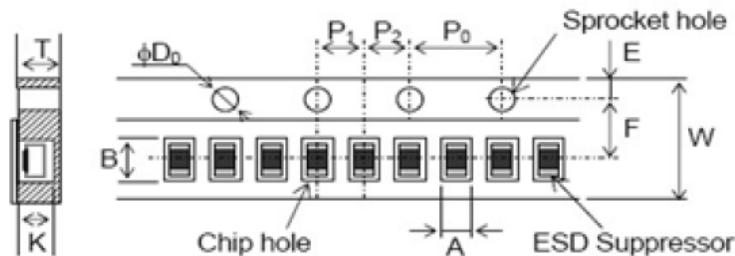


	a	b	c	d	e
Size (mm)	0.4	0.6	0.64	0.2	0.07

Dimensions: mm

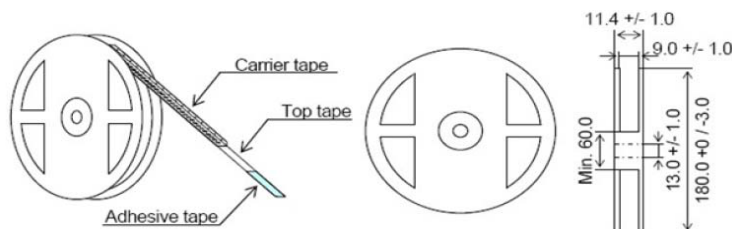
TAPE & REEL:

T= tape and reel (10,000 pcs per reel)



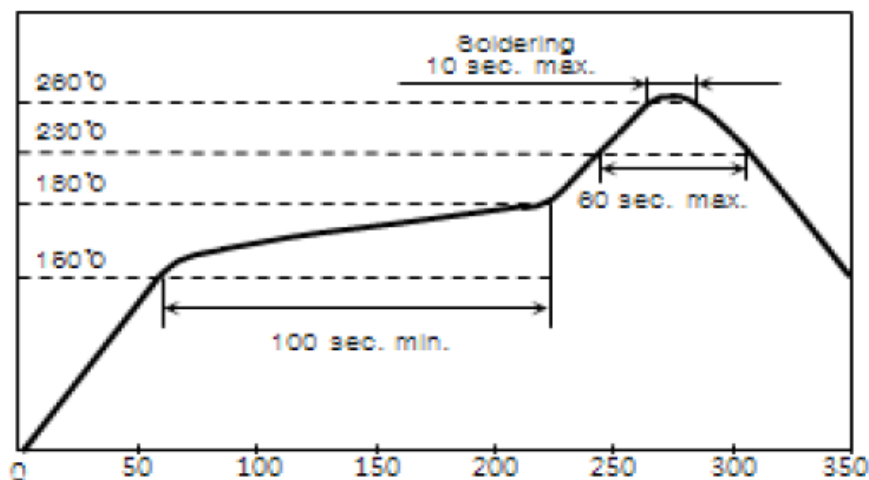
A	B	W	F	E
0.70±0.05	1.20±0.05	8.00±0.20	3.50±0.05	1.75±0.10

P ₀	P ₁	P ₂	ΦD ₀	K	T
4.00±0.10	2.00±0.10	2.00±0.05	1.50+0.1/-0	0.43±0.05	0.60±0.05



Dimensions: mm

REFLOW PROFILE:



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ABRACON IS
ISO9001:2008
CERTIFIED



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