

### Overview

**AMODiode** is a component which acts as a non-conductor on the circuit in normal circumstances. When over-voltage is loaded, it becomes a conductor which diverts over-current from circuits to ground at critical voltage level.

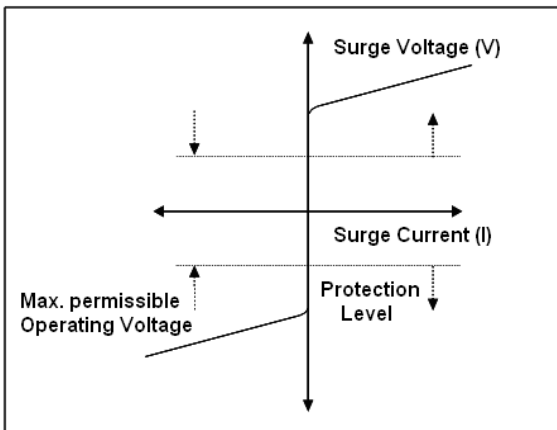


Fig 1 V-I Characteristic Curve

### Features

- Lead free
- Multilayer laminated structure
- IEC 61000-4-2 (ESD) level #4
- Low capacitance
- Ideal for high speed data applications
- High reliability over multi surge
- Forward & Reverse(+, -) direction property
- Low leakage current and inductance
- Easy to control electric capacity
- Excellent reliability against ESD

### Applications

- Antenna switch protection
- SAW filter protection
- USB 2.0 protection (Full, High speed)
- HDMI protection

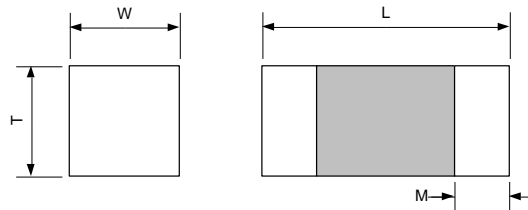
### Model Description

<b>ADUC</b>	<b>10</b>	<b>S</b>	<b>02</b>	<b>0R5</b>
(1)	(2)	(3)	(4)	(5)

- (1) Series name : "ADUC" – AMODiode Ultra low Capacitance type
- (2) Maximum continuous working voltage (Vdc) : "10"- 10V
- (3) Breakdown voltage tolerance : "S" - special order
- (4) Chip size : 02 means 0402 ( 1.0 x 0.5 mm)
- (5) Capacitance : 0R5 means 0.5pF, 1R1 means 1.1pF  
1R5 means 1.5pF, 3R3 means 3.3pF  
005 means 5pF, 010 means 10pF

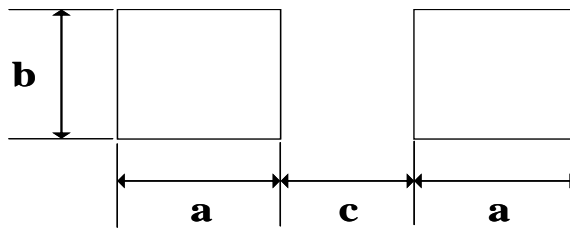


### Appearance



Symbol	L	W	T	M
Size (mm)	1.0 ± 0.10	0.5 ± 0.10	Max. 0.6	0.2 ± 0.10

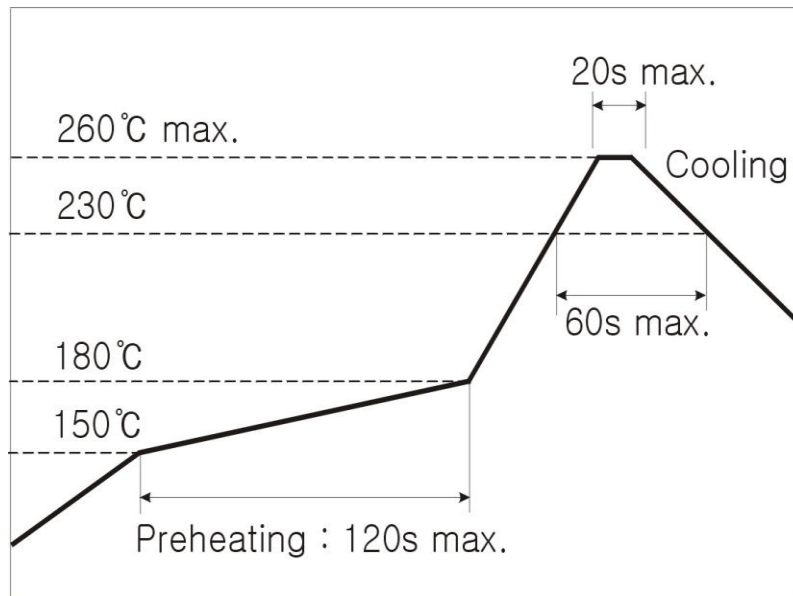
### Recommended Land pattern (Typical Dimensions)



Symbol	a	b	c
Size (mm)	0.61	0.51	0.51

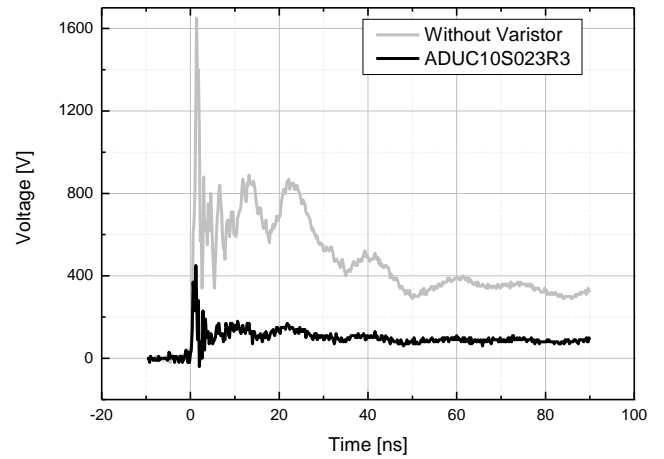
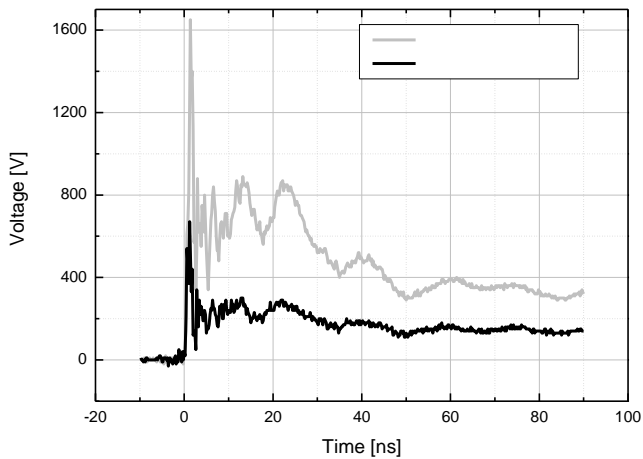
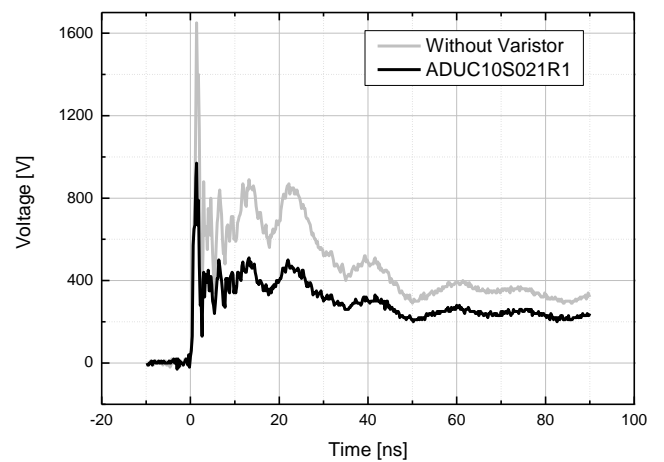
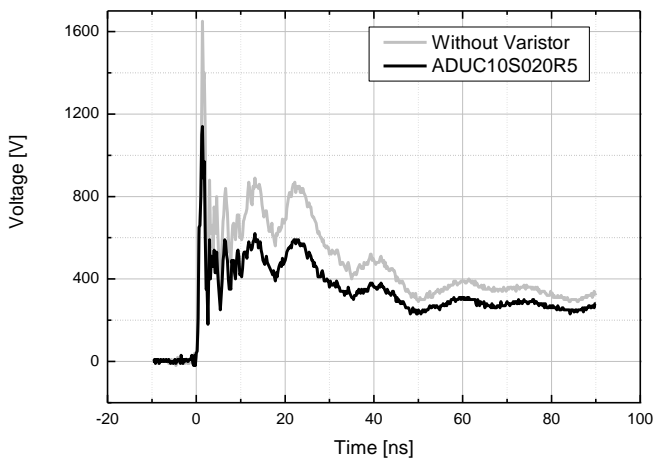
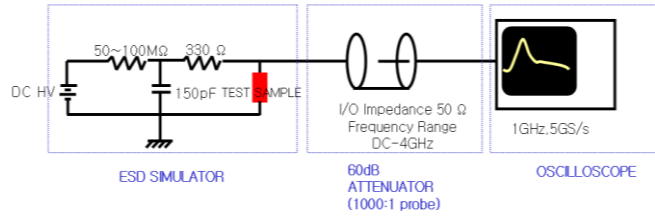
### Recommended Soldering Profile

- Pb Free Solder Paste : Sn/Ag/Cu ( 96.5 / 3.0 / 0.5)

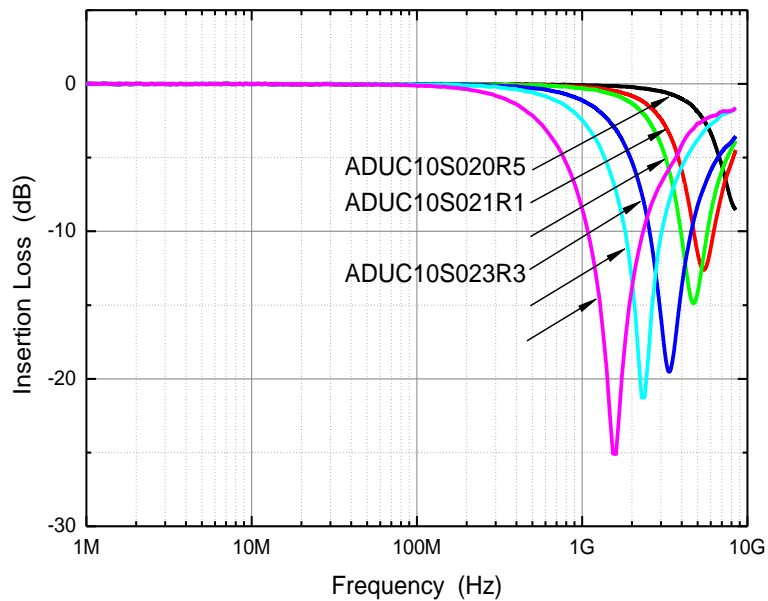


### ESD Voltage Waveform

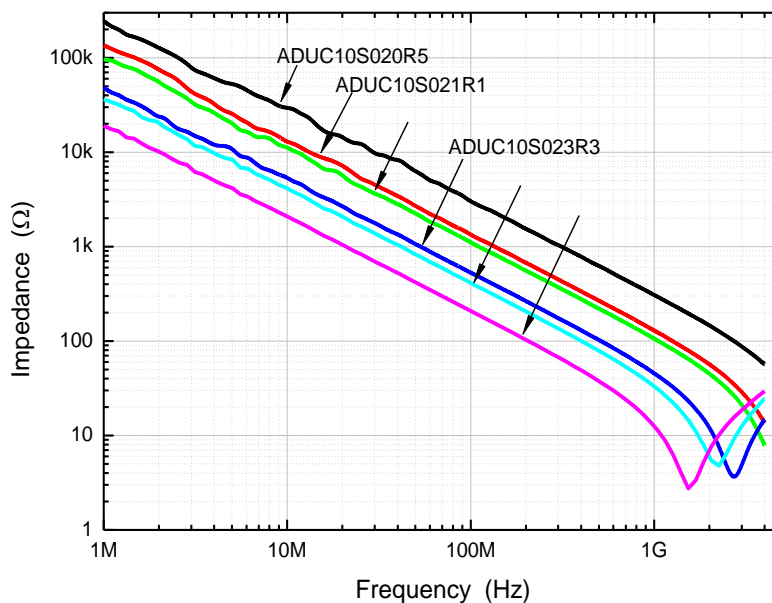
- Test setup



### Frequency Characteristics



### Impedance vs. Frequency(1005mm size)



### Capacitance vs. Frequency

