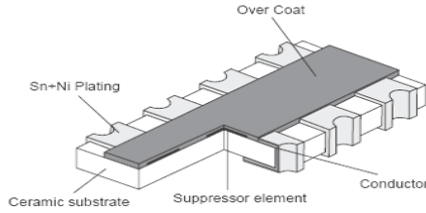


The content of this specification may change without notification 10/12/07



## FEATURES

- Low capacitance (<0.5pF)
- Ultra low leakage current (<1nA)
- Zero signal distortion
- Fast response time
- Bi-direction device

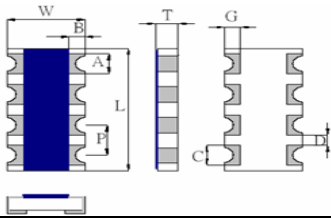
## HOW TO ORDER

UMSA	24	A	05	T	1	V1
Product Code	Size	Tolerance	Operating Voltage	Packaging	Typical Clamping Voltage	Typical Trigger Voltage
Ultra-Low Capacitance MAX Guard Suppressor Array	24: 0402x4 34: 0603x4	A: Suit For IEC6100-4-2  C: Suit For IEC6100-4-2 & AEC-Q200	03: 3.3V 05: 5.5V 12: 12V 24: 24V	T: Paper Tape (5K/10K)	1: 17V 2: 25V	V1: 150V V2: 250V

## APPLICATIONS

- Cell / smart phone
- Computers / Laptops
- Digital cameras
- PDA's
- Plasma display panels / LCD / TVs/ HDTVs
- Mp3 / Multimedia players
- Scanner / Printer
- Ultra-high speed data ports USB 2.0, IEEE1394, DVI HDMI, High Speed Ethernet.

## SCHEMATIC



## DIMENSIONS (mm)

Size	L	W	T	P	A	B	C	D	G
UMSA24	2.0±0.1	1.0±0.1	0.45±0.1	0.5±0.1	0.3±0.1	0.2±0.1	0.3±0.1	0.15±0.1	0.25±0.15
UMSA34	3.2±0.2	1.5±0.2	0.6±0.1	0.8±0.1	0.6±0.1	0.3±0.2	0.5±0.1	0.25±0.1	0.35±0.15

## ELECTRICAL CHARACTERISTICS

Type	Continuous Operating Voltage (Max.)	ESD Capability	Trigger Voltage (Typ.)	Clamping Voltage (Typ.)	Capacitance	Leakage Current (Typ.)	Response Time	ESD Pulse Withstand (Typ.)
UMSA24A03T1V1	3.3 VDC	Direct Discharge: 8KV Air Discharge:15 KV	150V	17V	<0.05pF	<10nA	<1ns	>1000 pulses
UMSA24A03T2V2			250V	25V				
UMSA24A05T1V1	5.5 VDC	Direct Discharge: 8KV Air Discharge:15 KV	150V	17V	<0.05pF	<10nA	<1ns	>1000 pulses
UMSA24A05T2V2			250V	25V				
UMSA24A12T1V1	12 VDC	Direct Discharge: 8KV Air Discharge:15 KV	150V	17V	<0.05pF	<10nA	<1ns	>1000 pulses
UMSA24A12T2V2			250V	25V				
UMSA24A24T1V1	24 VDC	Direct Discharge: 8KV Air Discharge:15 KV	150V	17V	<0.05pF	<10nA	<1ns	>1000 pulses
UMSA24A24T2V2			250V	25V				
UMSA34A03T1V1	3.3 VDC	Direct Discharge: 8KV Air Discharge:15 KV	150V	17V	<0.05pF	<10nA	<1ns	>1000 pulses
UMSA34A03T2V2			250V	25V				
UMSA34A05T1V1	5.5 VDC	Direct Discharge: 8KV Air Discharge:15 KV	150V	17V	<0.05pF	<10nA	<1ns	>1000 pulses
UMSA34A05T2V2			250V	25V				
UMSA34A12T1V1	12 VDC	Direct Discharge: 8KV Air Discharge:15 KV	150V	17V	<0.05pF	<10nA	<1ns	>1000 pulses
UMSA34A12T2V2			250V	25V				
UMSA34A24T1V1	24 VDC	Direct Discharge: 8KV Air Discharge:15 KV	150V	17V	<0.05pF	<10nA	<1ns	>1000 pulses
UMSA34A24T2V2			250V	25V				

- The function meets with the requirement of IEC 61000-4-2 specification.
- Trigger measurement made using Transmission Line Pulse method.
- Capacitance measured at 1 M~1.8 GHz.
- Performing under IEC 61000-4-2 level 4 (8KV contact discharge, 15KV air discharge).