

# MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

## MS0603ESDA-XX

Product specification

## Other Data

Body	ZnO
End termination	Ag/Ni/Sn
Packaging	Tape
Complies with Standard	IEC61000-4-2 、 IEC61000-4-5

### Notes:

\*1 AC voltage at 50~60Hz

\*2 Varistor voltage

Measured at 1mA DC

\*3 Capacitance

Measured at f=1kHz, Vrms=0.5V

\*4 Maximum clamping voltage

Measured at 1A by 8/20μs Pulse

\*5 Rated peak single pulsetransient current

Measured by 8/20μs Pulse

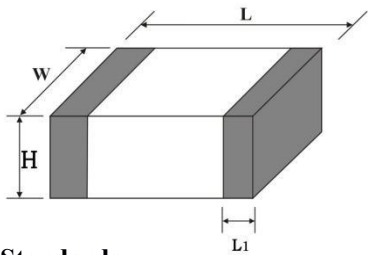
Technical Data	Symbol	Value	Unit
Maximum allowable continuous DC voltage	$V_{DC}$	5.0	V
Varistor voltage Measured*2 Varistor voltage tolerance	$V_B$	130 ±20	V %
Typical capacitance value measured*3	C	1.0	pF
Typical capacitance value tolerance		±0.3	PF
Maximum clamping voltage measured*4	$V_C$	250	V

## Reference Data

Response time	$T_{rise}$	<1	ns
Leakage current at $V_B \times 80\%$ (At initial state)	$I_{LVB}$	<20	μA
Leakage current at $V_B \times 80\%$ (After reliability Test)	$I_{LVBA}$	<100	μA
Operating ambient temperature		55~+125	°C
Storage temperature		40~+125	°C
Reflow temperature profile(Recommend)		260	°C

Unit: mm

PKG	Length (L)	Width (W)	High (H) Max	Termination (L1)
0603	1.60±0.15	0.80±0.15	0.95	0.35±0.15



**Standards**

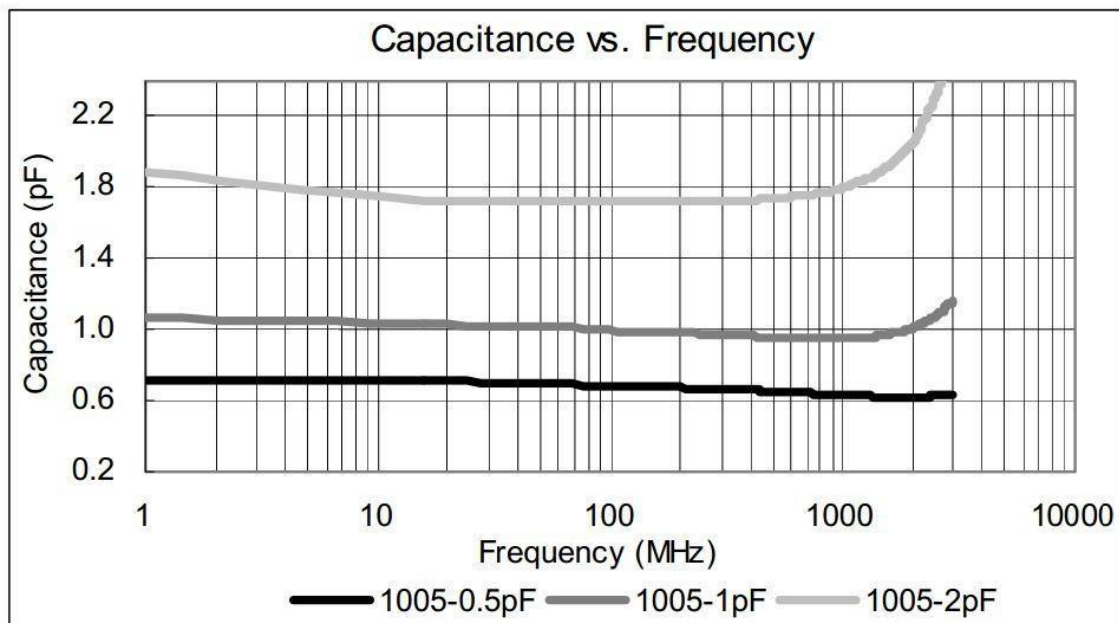
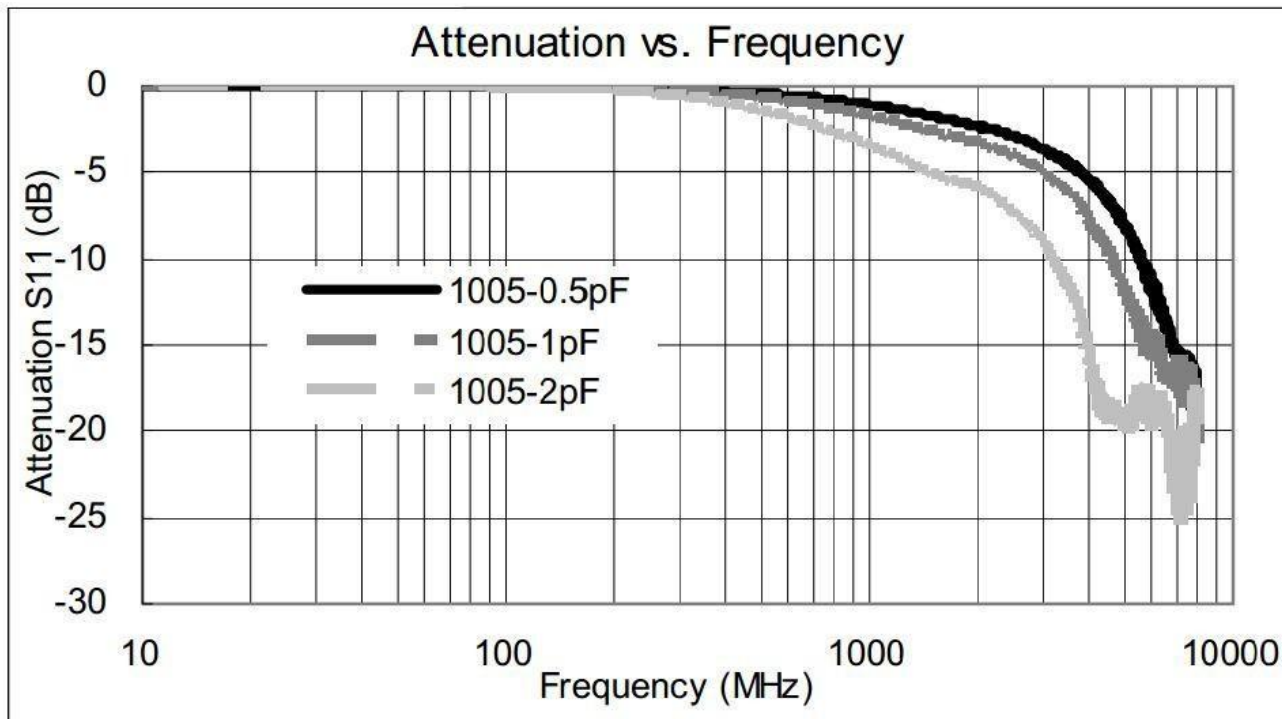
MS                      0603                      ESDA                      XX  
①                      ②                      ③                      ④

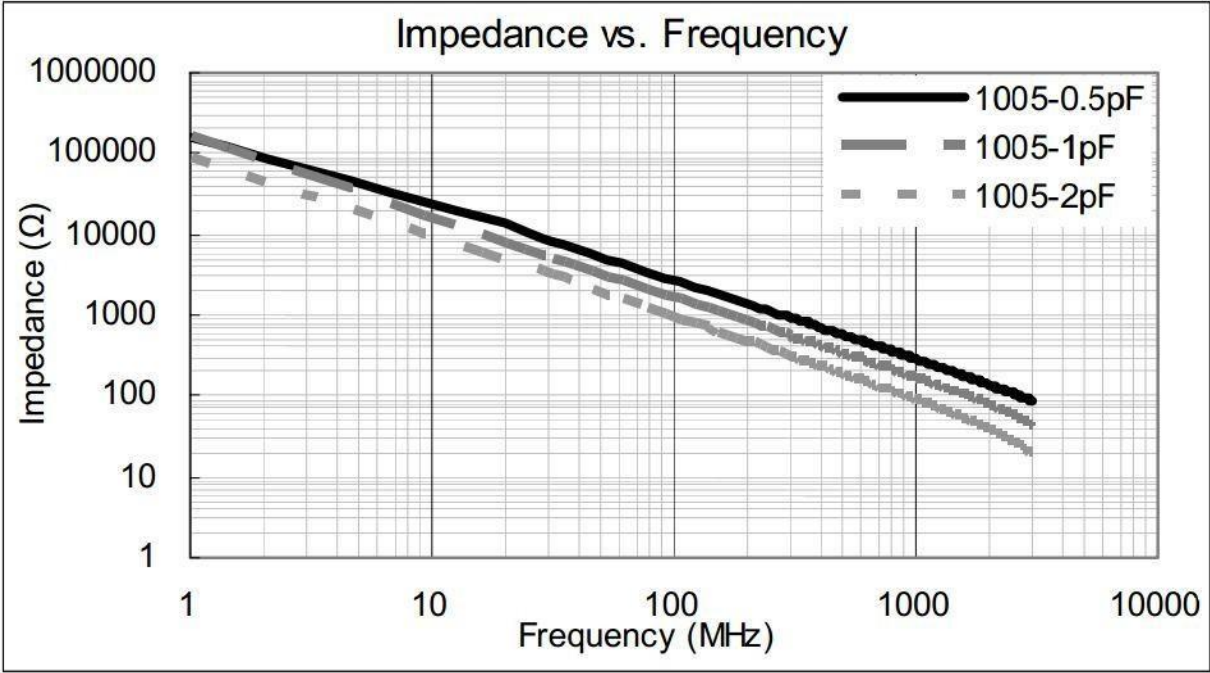
- ①production series: msksemi  
②size: 0603  
③type: ESD高分子保护器件  
④ V<sub>DC</sub>: 5V 9V 12V 14V 18V 24V

**Ordering Information**

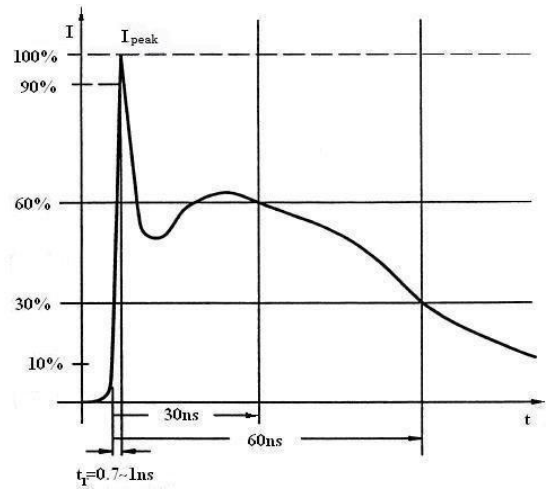
P/N	PKG	QTY
MS0603ESDA-05	0603	4000
MS0603ESDA-09	0603	4000
MS0603ESDA-12	0603	4000
MS0603ESDA-14	0603	4000
MS0603ESDA-18	0603	4000
MS0603ESDA-24	0603	4000

V-I characteristic





**Esd Wave Form**



IEC61000-4-2 Standards

SEVERITY LEVEL	AIRDIRCHARGE	DIRECT ISCHARGE
1	2 kV	2 kV
2	4 kV	4 kV
3	8 kV	6 kV
4	15 kV	8 kV

IEC61000-4-2 Compliant ESD Current Pulse Waveform

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