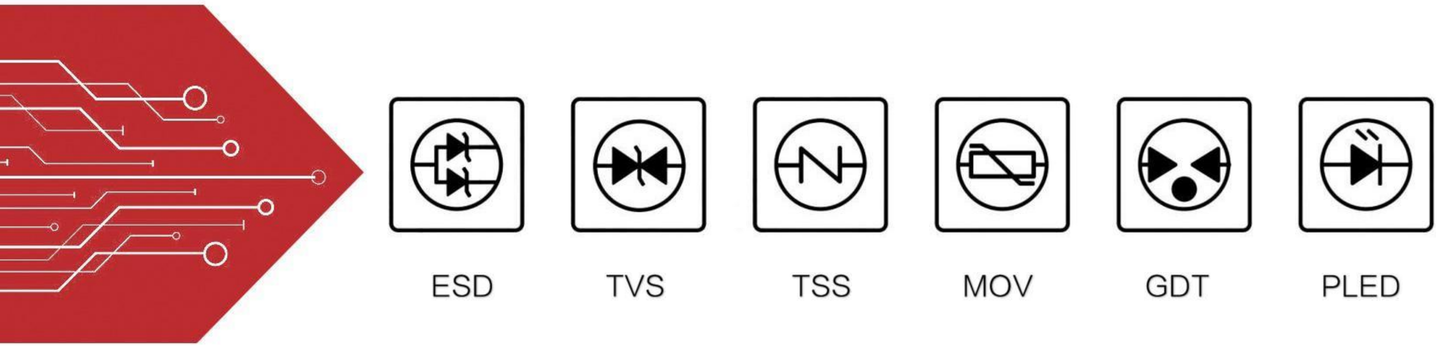
MSKSEMI
SEMICONDUCTOR



Product data sheet

Other Data

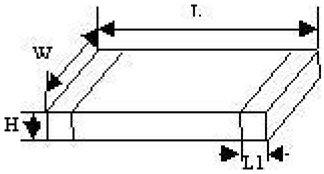
Body	ZnO
End termination	Ag/Ni/Sn
Packaging	Tape
Complies with Standard	IEC61000-4-2、IEC61000-4-5

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 pulse transient current	Measured by 8/20μs Pulse

Size: Unit：mm

PKG	Length（L）	Width（W）	High（H）	Termination（L1）
0402	1.00±0.20	0.50±0.20	0.70（max）	0.30±0.20



Standards

MS	0402	ESDA	XX
①	②	③	④

①production series：msksemi

②size：0402

③type：ESD高分子保护器件

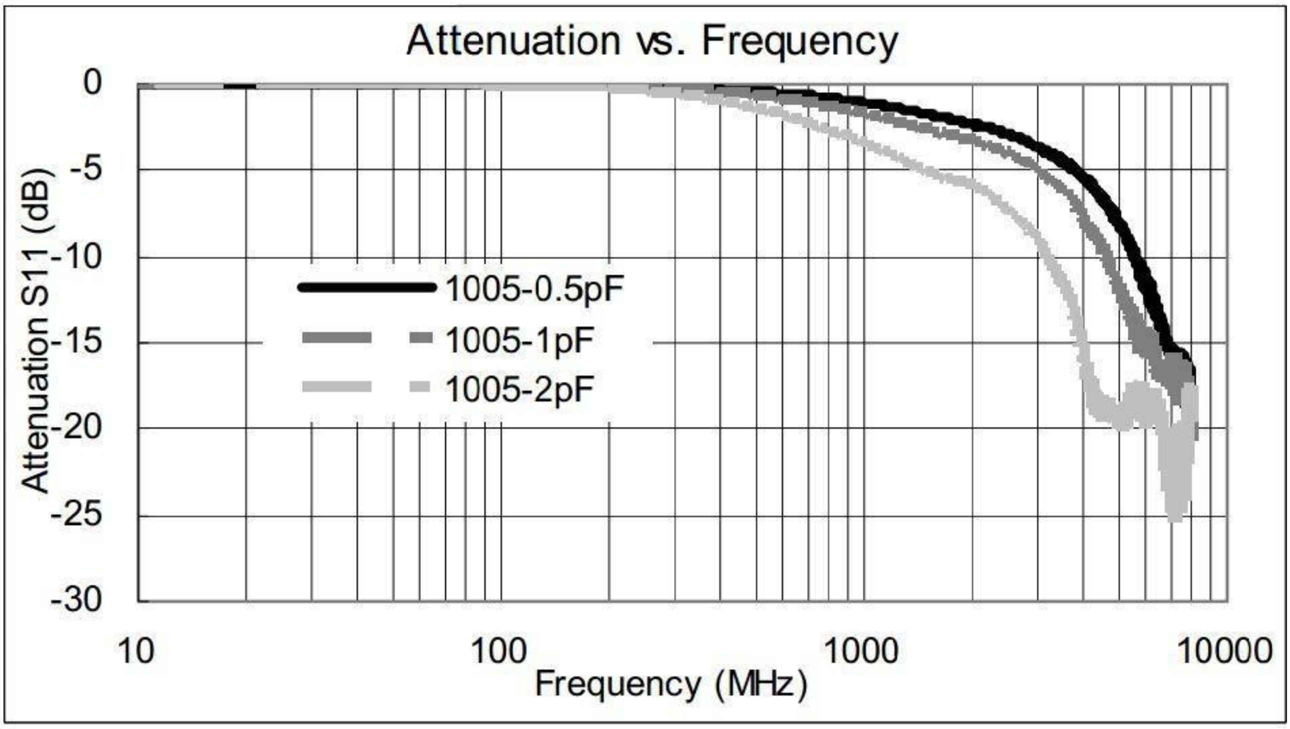
④ V_{DC} : 5V 9V 12V 14V 18V 24V

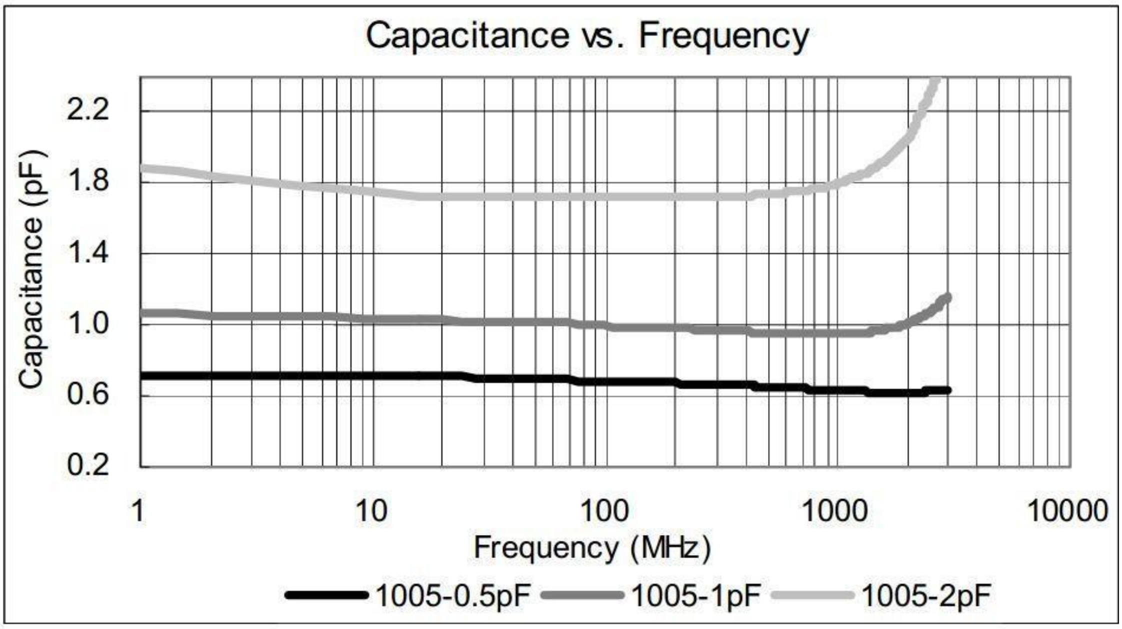
Technical Data	Symbol	Value	Unit
Maximum allowable continuous DC voltage	V_{DC}	5.0	V
Varistor voltage Measured*2 Varistor voltage tolerance	V_B	130 ±20	V %
Typical capacitance value measured*3	C	1.0	pF
Typical capacitance value tolerance		±0.3	PF
Maximum clamping voltage measured*4	V_C	250	V

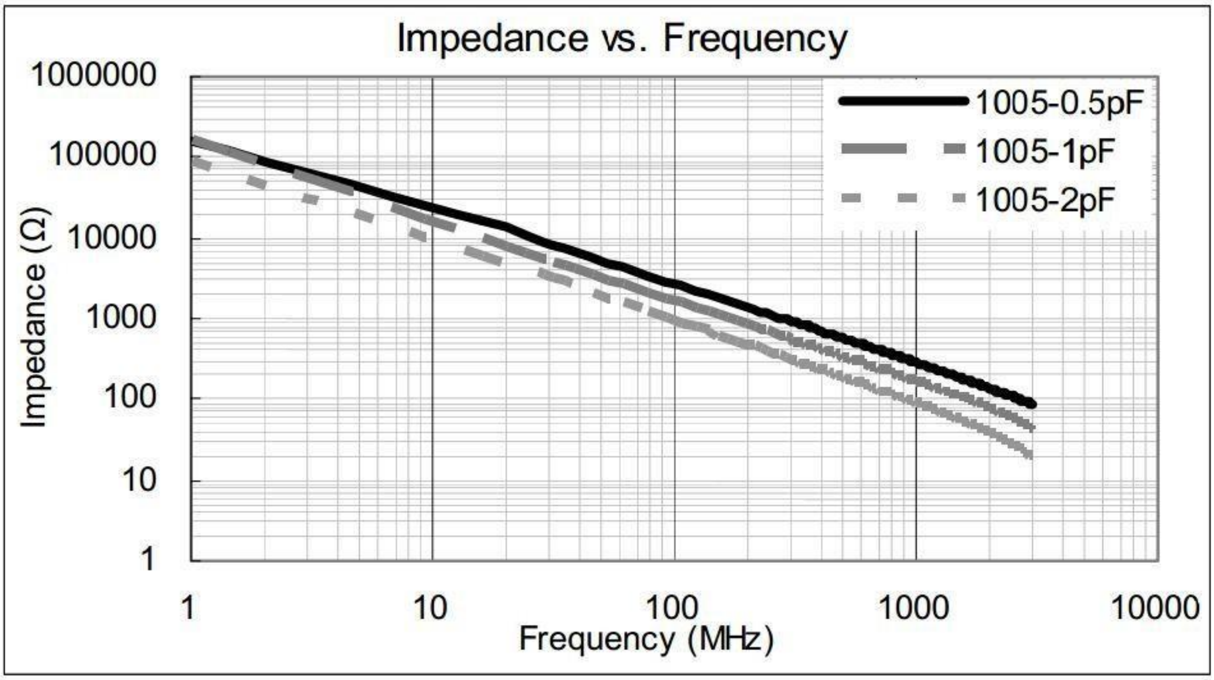
Reference Data

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

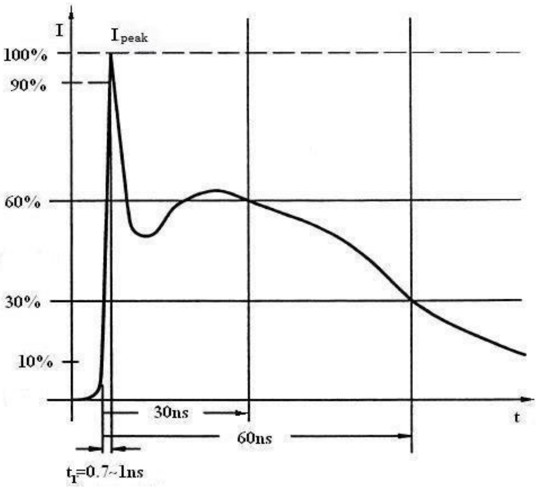
V-I characteristic







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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