



## Product data sheet

www.msksemi.com



Other Data Body End termination Packaging Complies with Standard Notes: \*1 AC voltage at 50~60Hz \*2 Varistor voltage

- \*3 Capacitance
- \*4 Maximum clamping voltage

\*5 Rated peak single pulse transient current

MS0603ESDA-XX HF 🧟

Semiconductor Compiance

ZnO Ag/Ni/Sn Tape IEC61000-4-2、IEC61000-4-5

Measured at 1mA DC Measured at f=1kHz,Vrms=0.5V Measured at 1A by  $8/20\mu$ s Pulse Measured by  $8/20\mu$ s Pulse

4

	Unit: mm					
PKG	Length (L)	Width (W)	High (H) Max	Termination (L1)		
0603	1.60±0.15	0.80±0.15	0.95	$0.35 \pm 0.15$		
H Standards						
	MS	<u>0603</u> <u>E</u>	<u>SDA</u> XX	- -		

1 2 3 1 production series: msksemi

③type: ESD高分子保护器件

<sup>(4)</sup> V<sub>DC</sub>: 5V 9V 12V 14V 18V 24V

Technical Data	Symbol	Value	Unit
Maximum allowable continuous DC voltage	V <sub>DC</sub>	5.0	V
Varistor voltage Measured*2	VB	130	V
Varistor voltage tolerance		±20	%
Typical capacitance value measured*3	С	1.0	pF
Typical capacitance value tolerance		±0.3	PF
Maximum clamping voltage measured*4	V <sub>C</sub>	250	V

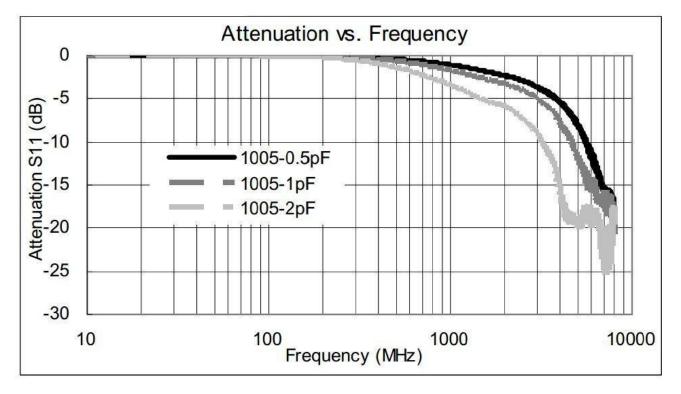
Reference Data			
Response time	T rise	<1	ns
Leakage current at $V_B \times 80\%$ (At initial state)	I <sub>LVB</sub>	<20	μA
Leakage current at $V_B \times 80\%$ (After reliability Test)	I <sub>LVBA</sub>	<100	μA
Operating ambient temperature		_	°C
		55~+125	
Storage temperature		-	°C
		40~+125	
Reflow temperature profile(Recommend)		260	°C

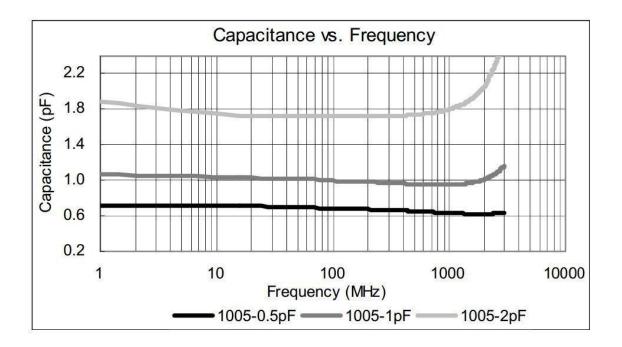
②size: 0603





## **V-I characteristic**

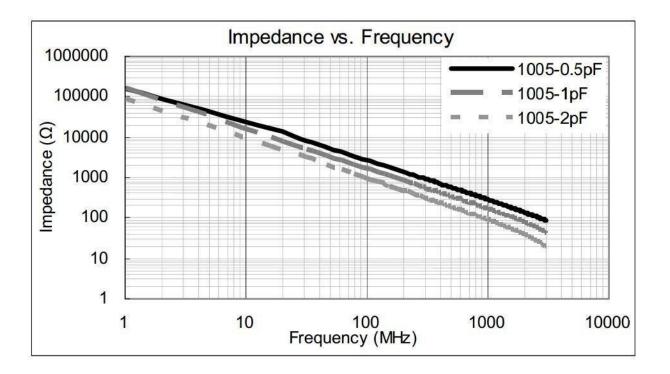




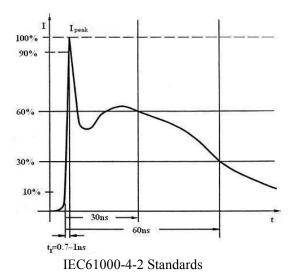




Semiconductor Compiance



**Esd Wave Form** 



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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