

Glass Ceramic ESD Suppressor – GESD Series

Operating Temp. :

Max. DC Working Voltage	5.5V	9V	15V
Operating Temp.	-55°C~85°C	-55°C~125°C.	-55°C~105°C



FEATURES

- Ultra low capacitance, suitable for ultra high speed lines
- Extremely low leakage current (nA scale)
- Excellent solderability (Ni, Sn plating)
- Glass material packaging, good resistance to high temperature

APPLICATIONS

- ESD protection for ultra high speed lines, such as USB3.0 I/F, HDMI I/F, etc.
- ESD protection of mobile phone antenna

PRODUCT IDENTIFICATION

<u>GESD</u>	<u>1005</u>	<u>H</u>	<u>090</u>	<u>CR10</u>	<u>G</u>	<u>P</u>	<u>T</u>																				
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SPECIFICATIONS

GESD0603H TYPE

Part Number	Max. DC Working Voltage	Trigger Voltage	Max. Clamping Voltage	Cut-off Frequency	Typical Capacitance	ESD Capability (IEC61000-4-2)
Test Condition	DC	ESD	ESD	@-0.3dB	@1V _{rms} , 1MHz	Direct Discharge
Units	Volts	Volts	Volts	GHz	pF	
Symbol	V _{WDC}	V _T ^{*1}	V _C ^{*2}	f ₀	C	
GESD0603H5R5CR10GPT	5.5	100~150	20	7.0	<0.10	LEVEL-4 8kV, Over 1000 times
GESD0603H090CR10GPT	9	100~250	25	7.0	<0.10	
GESD0603H150CR10GPT	15	100~250	25	7.0	<0.10	

GESD1005H TYPE

Part Number	Max. DC Working Voltage	Trigger Voltage	Max. Clamping Voltage	Cut-off Frequency	Typical Capacitance	ESD Capability (IEC61000-4-2)
Test Condition	DC	ESD	ESD	@-0.3dB	@1V _{rms} , 1MHz	Direct Discharge
Units	Volts	Volts	Volts	GHz	pF	
Symbol	V _{WDC}	V _T ^{*1}	V _C ^{*2}	f ₀	C	
GESD1005H5R5CR10GPT	5.5	100~150	20	7.0	<0.10	LEVEL-4 8kV, Over 1000 times
GESD1005H090CR10GPT	9	100~250	25	7.0	<0.10	
GESD1005H150CR10GPT	15	100~250	25	7.0	<0.10	

GESD1608H TYPE

Part Number	Max. DC Working Voltage	Trigger Voltage	Max. Clamping Voltage	Cut-off Frequency	Typical Capacitance	ESD Capability (IEC61000-4-2)
Test Condition	DC	ESD	ESD	@-0.3dB	@1V _{rms} , 1MHz	Direct Discharge
Units	Volts	Volts	Volts	GHz	pF	
Symbol	V _{WDC}	V _T ^{*1}	V _C ^{*2}	f ₀	C	
GESD1608H5R5CR10GPT	5.5	100~150	20	7.0	<0.10	LEVEL-4 8kV, Over 1000 times
GESD1608H090CR10GPT	9	100~250	25	7.0	<0.10	
GESD1608H150CR10GPT	15	100~250	25	7.0	<0.10	

※V_{DC}: Max DC working voltage of varistor must exceed or equal to 1.5 times that of the application circuit voltage (V_n), V_{DC} ≥ 1.5 V_n.

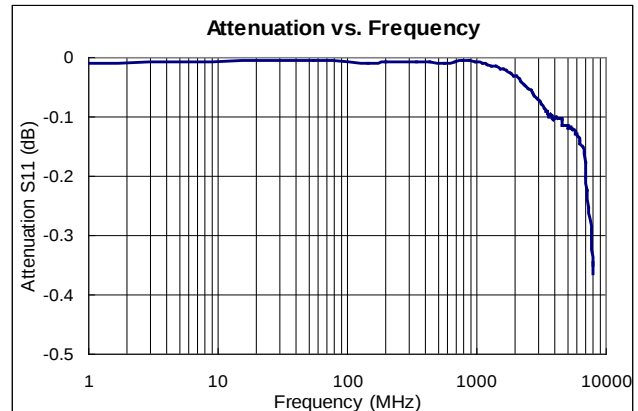
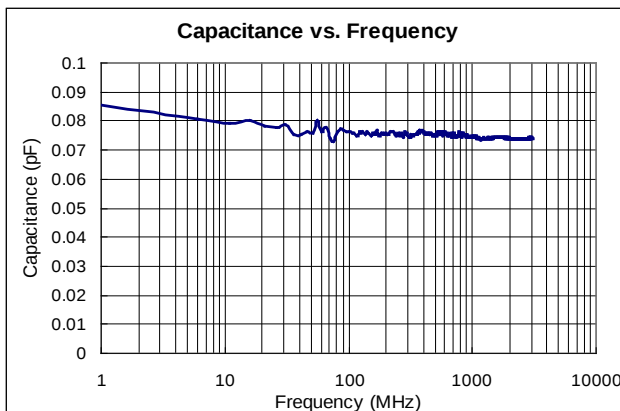
※*1: V_T, The breakdown voltage across the GESD according IEC61000-4-2 8kV contact discharge.

※*2: V_C, Maximum peak voltage across the GESD measured at 30ns after initiation of pulse on IEC61000-4-2 8kV.

And products with other electrical characteristics can be provided upon customer's request, please contact your local sales.

TYPICAL ELECTRICAL CHARACTERISTICS

Ultra low capacitance type: GESD0603H/GESD1005H/GESD1608H series, C=0.085pF



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Ultra low capacitance type: GESD0603H/GESD1005H/GESD1608H series, $C=0.085\text{pF}$

