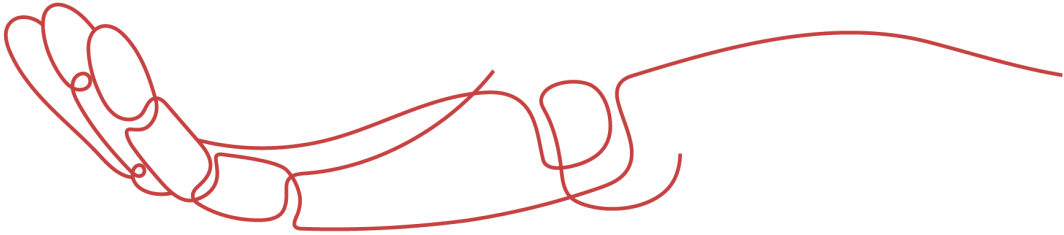




PRODUCT DATA SHEET



To learn more about JGSEMI, please visit our website at



Datasheet



Resources



Samples

Please note: Please check the JINGAO Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.jg-semi.cn. Please email any questions regarding the system integration to JINGAO_questions@jgsemi.com.

Description

- This device can be used in sensitive electronics protection against ESD event, and used to meet the ESD immunity requirements of IEC61000-4-2 (15KV air, 8KV contact discharge).



Feature

- ESD protection to meet IEC61000-4-2
- ESD contact discharge typical 8KV, max 15KV
- ESD air discharge typical 15KV, max 25KV
- Surface mount
- low leakage current
- Fast response time
- Bi-directional ESD protection
- Lead free solder termination



Schematic

Application

- Cell phones
- Portable devices
- Digital Cameras
- Power supplies

Absolute Maximum Ratings

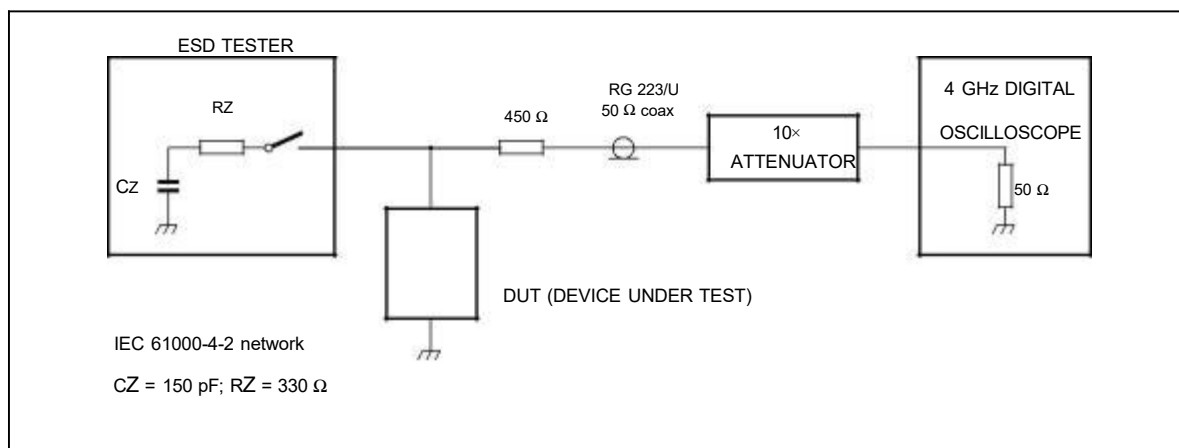
Parameter	Symbol	Value	Unit
Maximum Contact discharge voltage Per IEC61000-4-2	---	15KV	V
Maximum Air discharge voltage Per IEC61000-4-2	---	25KV	V
Maximum Operating temperature	T _{OPER}	-40 to +90	°C
Maximum Storage temperature	T _{STG}	-55 to +125	°C
Maximum lead temperature for soldering during 10s	T _L	260	°C

Electrical Characteristics(TA=25°C)

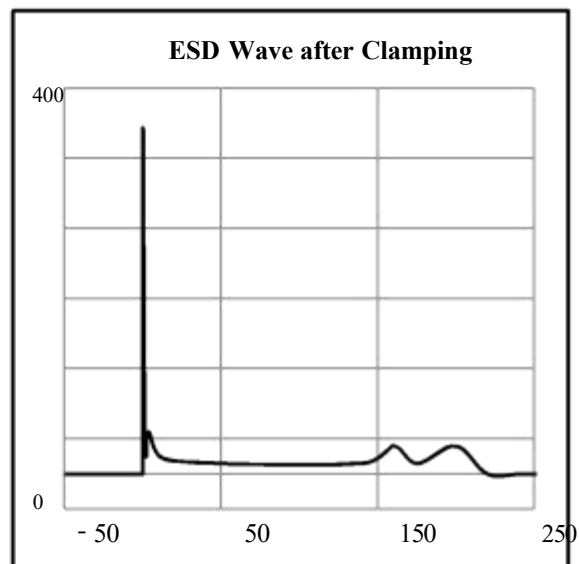
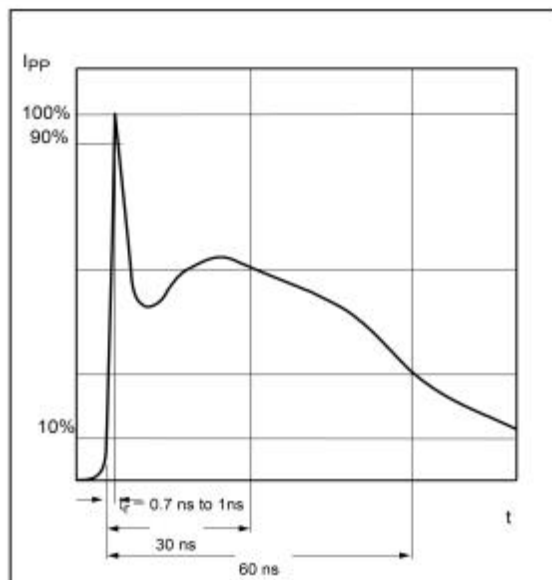
Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Rated Voltage	V _R	---	---	---	5	V
Trigger voltage	V _T	IEC61000-4-2 8KV contact discharge	---	9	---	V
Clamping voltage	V _C	IEC61000-4-2 8KV contact discharge	---	35	---	V
Leakage current	I _L	DC 5V shall be applied on component	---		2	uA
Capacitance	C _P	V _R = 0V, f = 1MHz	---	3		pF

Note: 1 Trigger and clamping voltage are measured per IEC 61000-4-2, 8KV contact discharge method.
 2 After reliability tests such as high temp storage, temp cycles, continuous ESD strike etc, the maximum leakage current is less than 2uA.

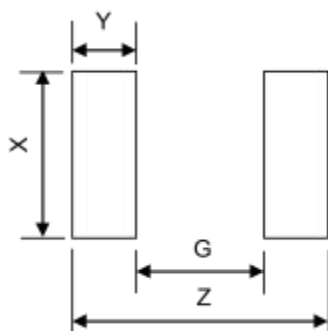
ESD Clamping Test



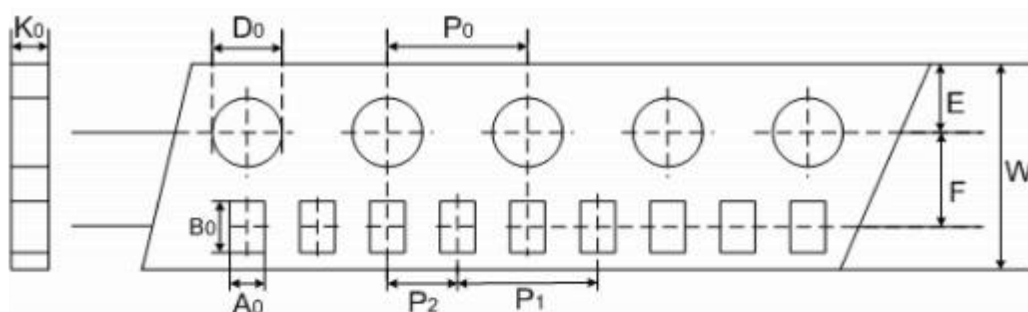
ESD Clamping Test Waveforms



Recommended Soldering Pad

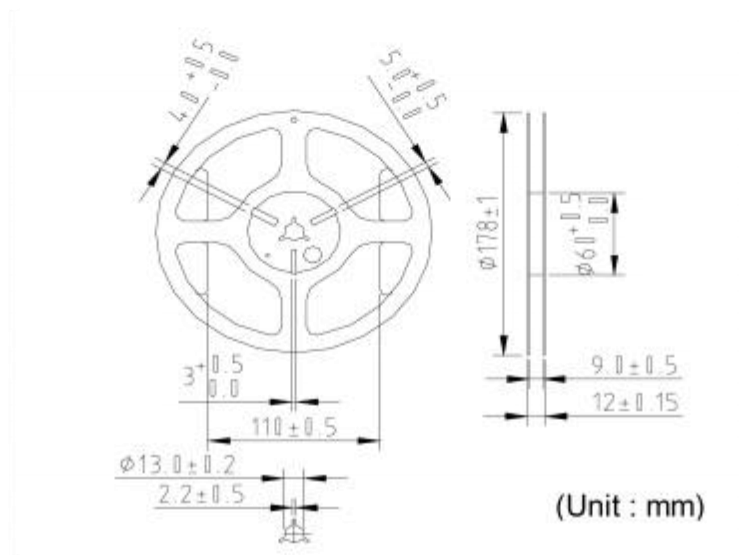


Size(EIA)	0603
Z	3.0mm
G	1.0mm
X	1.0mm
Y	1.0mm

Taping Specification (0603 type)


(Unit : mm)

index	A ₀	B ₀	W	E	F	P ₁	P ₂	P ₀	D ₀	K ₀
Type	±0.05	±0.12	±0.2	±0.1	±0.05	±0.1	±0.05	±0.1	±0.1	±0.1
0603	1.10	1.90	8	1.75	3.5	4	2	4	1.55	0.6

Quantity (4000 pcs / reel)


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