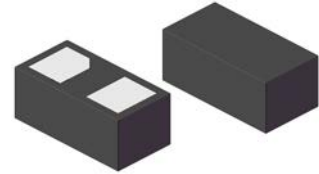


## Features

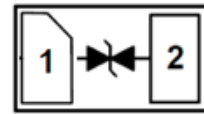
- Excellent clamping capability
- Fast response time
- Low leakage
- ESD per IEC61000-4-2  
 >30KV(Air&Contact Model)



DFN0603

## Applications

- USB3.0, Firewire, DVI, HDMI, S-ATA
- Thunderbolt, Display Port
- Mobile HDMI Link, MDDI, MIPI, SWP / NFC



Schematic Diagram

## Absolute Maximum Ratings (T<sub>A</sub>=25°C unless otherwise specified)

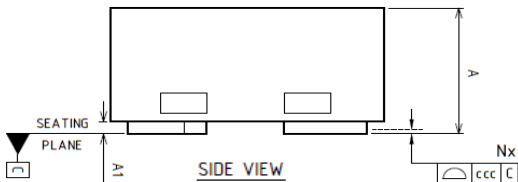
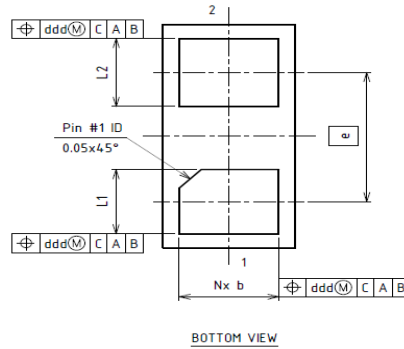
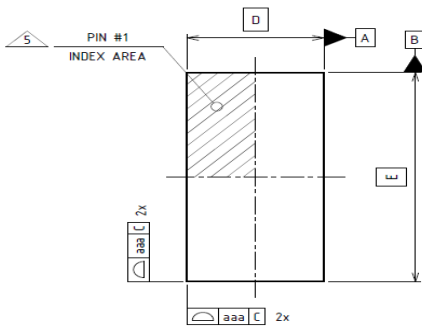
Parameter	Symbol	Rating	Unit
Peak Pulse Power(t <sub>p</sub> =8/20uS)	p <sub>PP</sub>	80	W
Maximum Reverse Peak Pulse Current (IEC61000-4-5 8/20μS Pulse)	I <sub>PP</sub>	7	A
Maximum Operation Junction Temperature	T <sub>J</sub>	- 55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	- 55 to +150	°C

## Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Reverse Stand-off Voltage	V <sub>RWM</sub>		-	-	5.5	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> =5.5V	-	-	0.1	uA
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>R</sub> =1mA	6	7	10	V
Clamping Voltage	V <sub>C1</sub>	I <sub>PP</sub> =1A, T <sub>P</sub> =8/20uS	-	8	-	V
	V <sub>C2</sub>	I <sub>PP</sub> =7A, T <sub>P</sub> =8/20uS	-	12	-	V
Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> =0V, f=1MHz	-	10	12	pF

**Package Outline Dimensions**

**DFN0603**



**Dimensions in millimeters**

Symbols	Min.	Nom.	Max.
A	0.28	0.30	0.32
A1	0.00	0.02	0.05
b	0.18	0.23	0.28
D	0.30 BSC		
E	0.60 BSC		
e	0.35 BSC		
L1	0.12	0.17	0.22
L2	0.13	0.18	0.23
aaa	0.05		
ccc	0.03		
ddd	0.10		

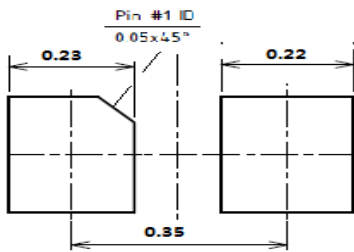
**Dimensions in inches**

Symbols	Min.	Nom.	Max.
A	0.011	0.012	0.013
A1	0.000	0.001	0.002
b	0.007	0.009	0.011
D	0.012 BSC		
E	0.024 BSC		
e	0.014 BSC		
L1	0.005	0.007	0.009
L2	0.005	0.007	0.009
aaa	0.002		
ccc	0.001		
ddd	0.004		

**NOTE:**

1. Dimension and tolerance as per ASME Y14.5-2009
2. "e" represents the terminal grid pitch.
3. N is the total number of terminals.
4. The location of the marked terminal #1 identifier is within the hatched area
5. The dimension includes stand-off height "A1" and package body thickness, but does not include attached features e.g. external heatsink or chip capacitors, an internal heatslug is not considered as attached feature.

**Recommended Pad Layout**



(Dimension in mm)

**Order Information**

Device	Package	Marking	Carrier	Quantity	HSF Status
GSEN5B120	DFN0603	G	Tape & Reel	10,000pcs / Reel	RoHS compliant