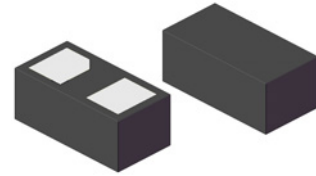
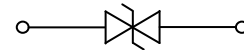


## Features

- 150W peak pulse power ( $t_p = 8/20\mu s$ )
- DFN0603 package
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Medium capacitance ( $C_J = 5pF$  max.)
- Protection one data/power line to:
  - IEC 61000-4-2  $\pm 30kV$  contact  $\pm 30kV$  air
  - IEC 61000-4-4 (EFT) 40A (5/50ns) IEC
  - 61000-4-5 (Lightning) 5.5A (8/20 $\mu s$ )
- RoHS compliant



**DFN0603**



## Applications

- Audio Line, Speaker, Headset, Microphone Protection
- Human Interface Devices (Keyboard, Touchpad, Buttons)

**Schematic Diagram**

## Absolute Maximum Ratings ( $T_A = 25^\circ C$ unless otherwise specified)

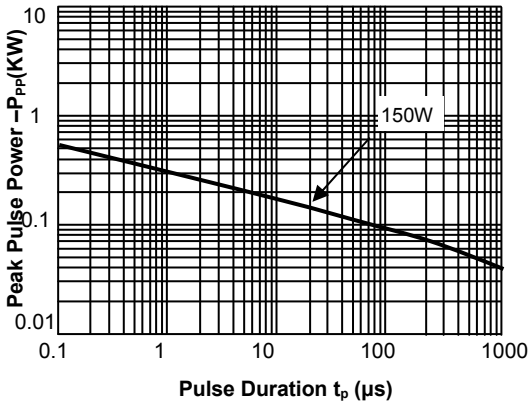
Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_p = 8/20\mu s$ )	$P_{PP}$	150	W
ESD contact/air discharge (IEC-61000-4-2)	$V_{ESD}$	30	kV
Peak Pulse Current ( $t_p = 8/20\mu s$ )	$I_{PP}$	5.5	A
Junction Temperature	$T_J$	-55 to +125	$^\circ C$
Storage Temperature	$T_{STG}$	-55 to +150	$^\circ C$

## Electrical Characteristics ( $T_A = 25^\circ C$ unless otherwise specified)

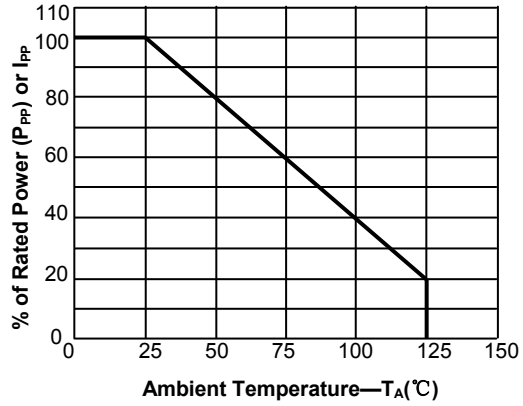
Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse Stand-Off Voltage	$V_{RWM}$		-	-	12	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T = 1mA$	13.4	-	-	V
Reverse Leakage Current	$I_R$	$V_R = 12V$	-	-	200	nA
Clamping Voltage (IEC 61000-4-5)	$V_C$	$I_{PP} = 1A$	-	17	20	V
		$I_{PP} = 5.5A$	-	23	26	V
Junction Capacitance	$C_J$	$V_R = 0V, f = 1MHz$	-	3.5	5	pF

**Typical Characteristic Curves**

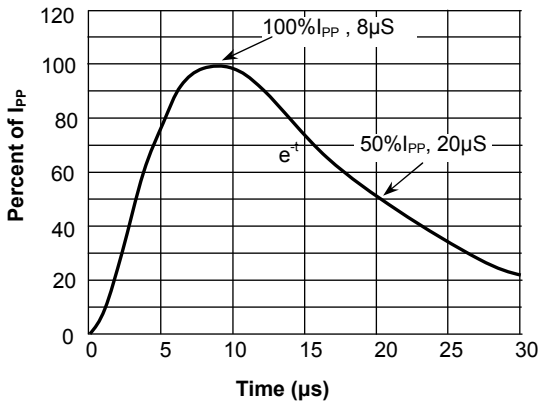
**Fig.1 Peak Pulse Power Rating Curve**



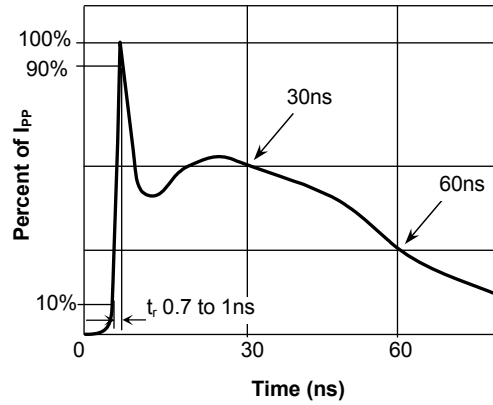
**Fig.2 Pulse Derating Curve**



**Fig.3 Pulse Waveform-8/20μs**

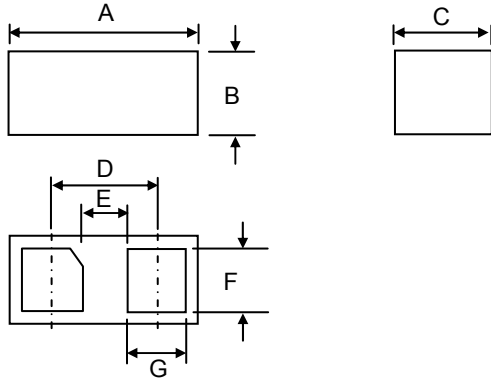


**Fig.4 Pulse Waveform-ESD(IEC61000-4-2)**



**Product Outline Dimensions**

**DFN0603**



Symbol	Dimensions in millimeters		
	Min	Nom	Max
A	0.585	0.610	0.635
B	0.270	0.290	0.310
C	0.285	0.310	0.335
F	0.210	0.230	0.250
G	0.170	0.190	0.210
D	0.340		
E	0.150		

**Order Information**

MPN	Package	Marking	Quantity	HSF Status
GSEN12B035	DFN0603	F	15000pcs / Reel	RoHS Compliant