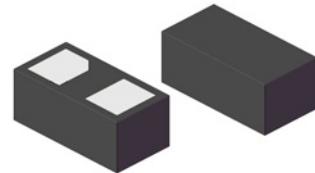
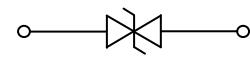


Features

- 70W peak pulse power ($t_p=8/20\mu s$)
- Tiny DFN0603 package
- Bidirectional configuration
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Medium capacitance ($C_J=12pF$ typ.)
- 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) 9A (8/20 μs)
- RoHS compliant



DFN0603



Schematic Diagram

Applications

- Audio Lines, Speakers, Headsets, Microphone Protection
- Human Interface Devices (Keyboards, Touchpads, Buttons)

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

Parameter	Symbol	Max.	Unit
Peak Pulse Power ($T_p=8/20\mu s$)	P_{PP}	70	W
ESD Contact/Air Discharge (IEC-61000-4-2)	V_{ESD}	30	kV
Peak Pulse Current ($t_p=8/20\mu s$)	I_{PP}	9	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	Conditions	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	3.3	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	3.4	-	-	V
Reverse Leakage Current	I_R	$V_R=3.3V$	-	-	0.2	μA
Clamping Voltage (IEC61000-4-5)	V_C	$I_{PP}=9A$	-	-	8	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$	-	12	-	pF

Typical Characteristic Curves

Fig.1 Peak Pulse Power Rating Curve

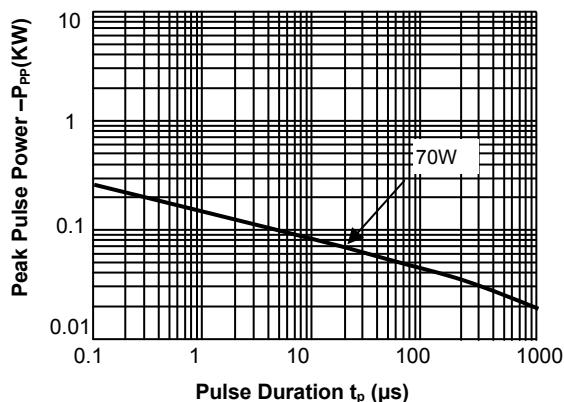


Fig.2 Pulse Derating Curve

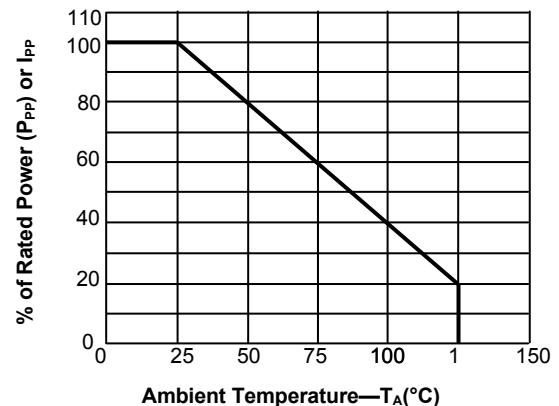


Fig.3 Pulse Waveform-8/20 μs

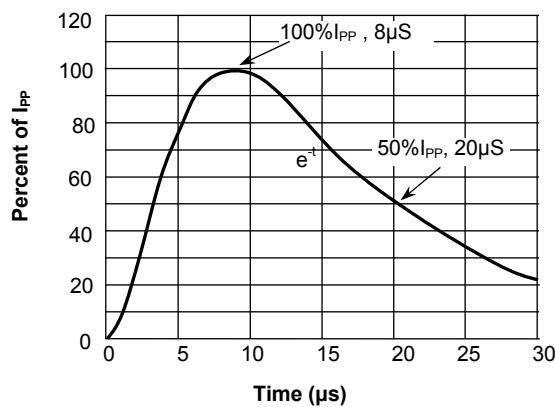
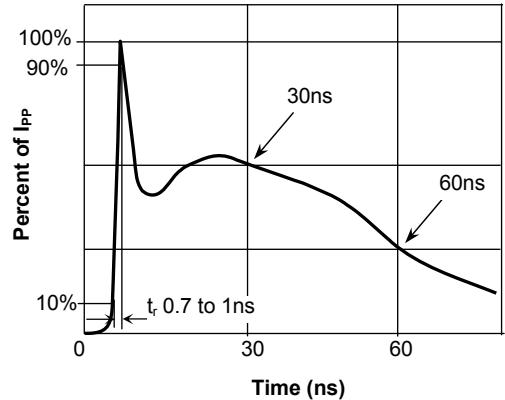
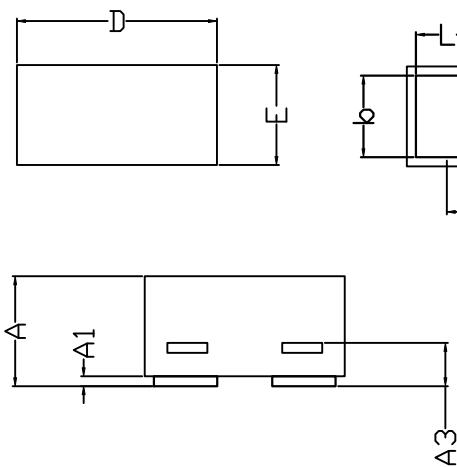


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)



Package Outline Dimensions

DFN0603



Symbol	Dimensions in millimeters		
	Min	N	Max
A	0.23	-	0.33
A1	0.00	-	0.05
A3	0.102 REF		
D	0.55	0.60	0.65
E	0.25	0.30	0.35
b	0.215	0.245	0.275
L	0.13	0.18	0.23
L1	0.13	0.18	0.23
e	0.355 BSC		

Ordering Information

MPN	Package	Marking	Quantity	HSF Status
GSEN3B120	DFN0603	B	10,000pcs / Reel	RoHS compliant