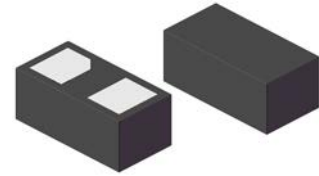
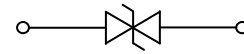


Features

- 70 Watts peak pulse power ($T_P = 8/20 \mu\text{S}$)
- Bidirectional configuration
- Low clamping voltage
- Low leakage current
- Medium capacitance ($C_J=15\text{pF typ.}$)
- Protection one data/power line to:
 IEC 61000-4-2 $\pm 30\text{kV}$ contact $\pm 30\text{kV}$ air
 IEC 61000-4-4 (EFT) 40A (5/50 nS)
 IEC 61000-4-5 (Lightning) 6A (8/20 μS)



DFN0603



Schematic Diagram

Applications

- Audio Line, Speaker, Headset, Microphone Protection
- Human Interface Devices (Keyboards, Touchpads, Buttons)

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

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20 \mu\text{S}$)	P_{PP}	70	W
ESD Contact/Air Discharge (IEC-61000-4-2)	V_{ESD}	30	kV
Peak Pulse Current ($T_P = 8/20 \mu\text{S}$)	I_{PP}	6	A
Junction Temperature	T_J	-55 to +125	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse Stand-Off Voltage	V_{RWM}		-	-	5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	5.6	6.5	-	V
Reverse Leakage Current	I_R	$V_R=5.0\text{V}$	-	5.0	100	nA
Clamping Voltage (IEC 61000-4-5)	V_C	$I_{PP}=1\text{A}$	-	7.8	-	V
		$I_{PP}=6\text{A}$	-	10.2	12	V
Junction Capacitance	C_J	$V_R=0\text{V}, f=1\text{MHz}$	-	15	-	pF

Typical Characteristic Curves

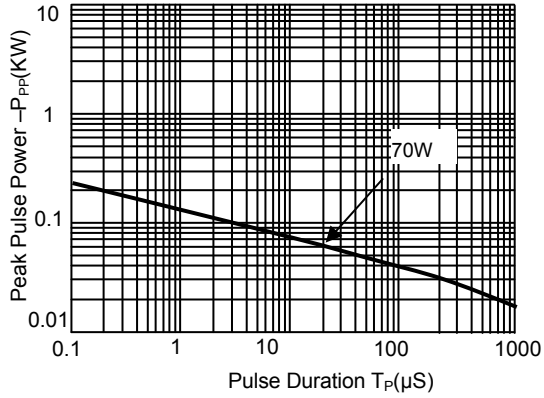


Figure .1 Peak Pulse Power Rating Curve

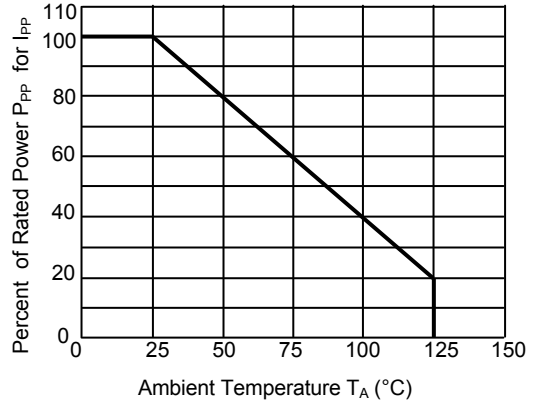


Figure .2 Pulse Derating Curve

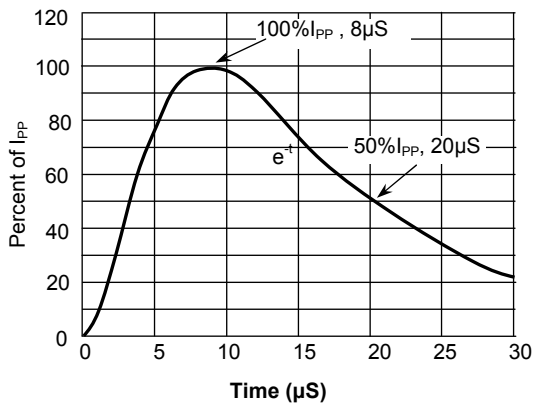


Figure.3 Pulse Waveform-8/20 μS

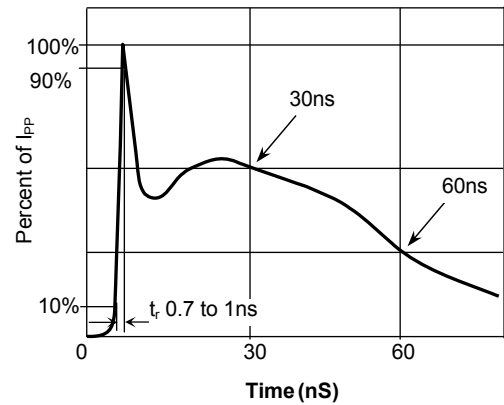
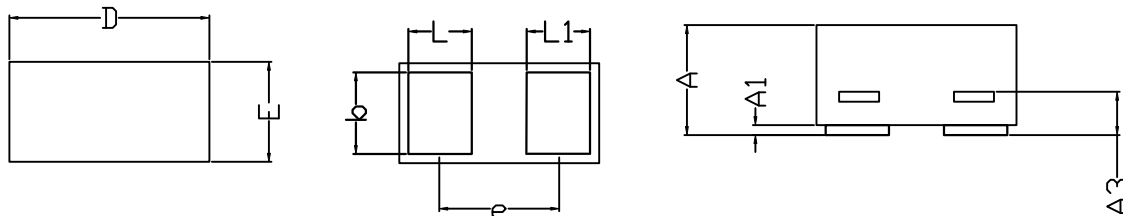


Figure.4 Pulse Waveform-ESD (IEC61000-4-2)

Package Outline Dimensions DFN0603



Symbol	Dimensions in millimeters		
	Min	Nom	Max
A	0.23	-	0.33
A1	0	-	0.05
A3	0.102 REF		
D	0.55	0.6	0.65
E	0.25	0.3	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		

Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status
GSEN5B153	DFN0603	A	Tape & Reel	15,000pcs / Reel	RoHS compliant