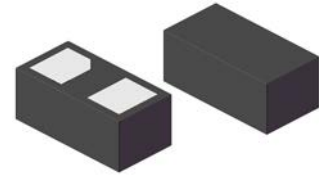


**Features**

- 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  $\mu\text{S}$ )



**DFN0603**



**Schematic Diagram**

**Applications**

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

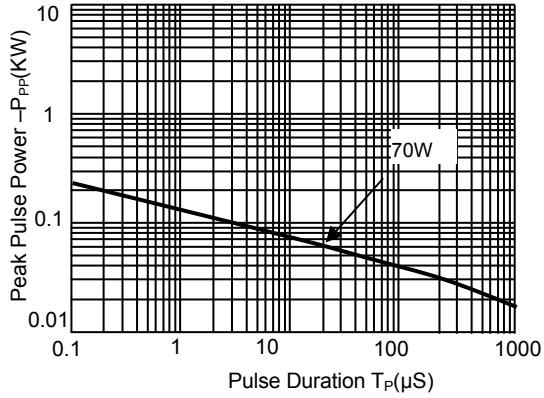
**Absolute Maximum Ratings** ( $T_A=25^\circ\text{C}$  unless otherwise specified)

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	$^\circ\text{C}$

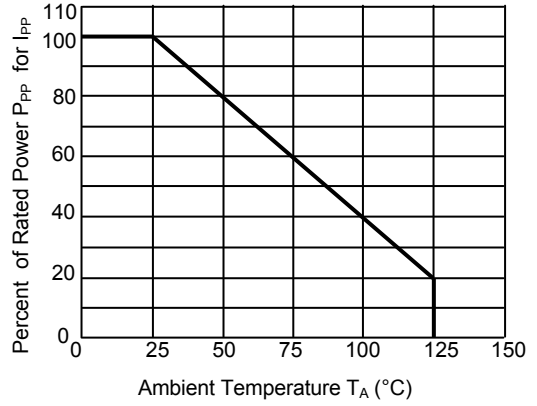
**Electrical Characteristics** ( $T_A=25^\circ\text{C}$  unless otherwise specified)

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

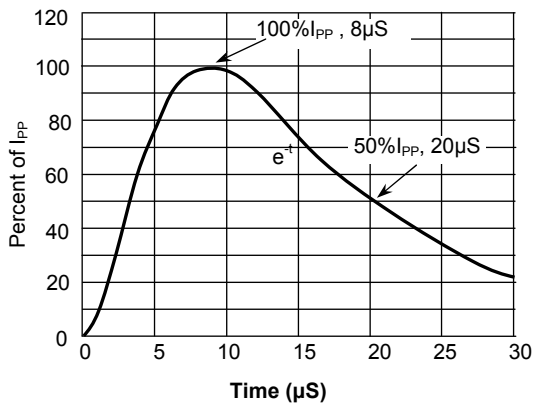
**Typical Characteristic Curves**



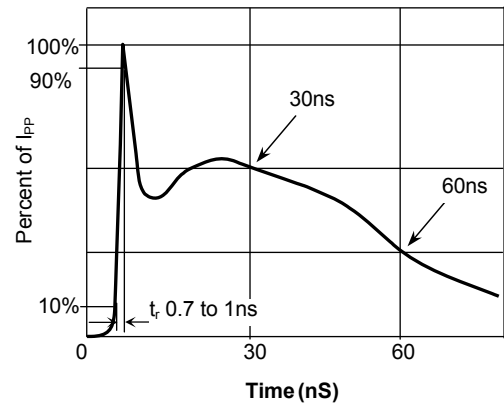
**Figure .1 Peak Pulse Power Rating Curve**



**Figure .2 Pulse Derating Curve**

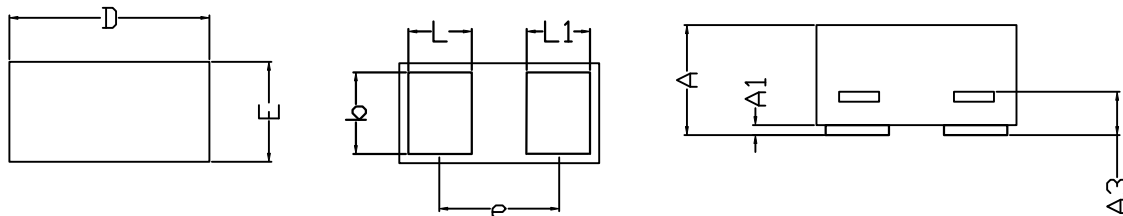


**Figure.3 Pulse Waveform-8/20 μS**



**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