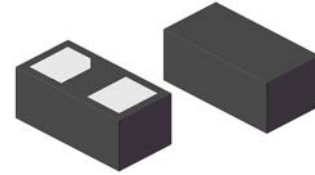


**Features**

- Tiny DFN0603 package
- Bi-directional configurations
- Low clamping voltage
- Low leakage current
- Protection one data/power line to: IEC 61000-4-2 ±30kV contact ±30kV air IEC 61000-4-5 (Lightning) 8A (8/20 μS)



**DFN0603**

**Applications**

- Signal line protection
- Audio Lines, Speakers, Microphone Protection
- Power lines protection
- I/O Interface Devices (Keyboards, Touchpads, Buttons)



**Schematic Diagram**

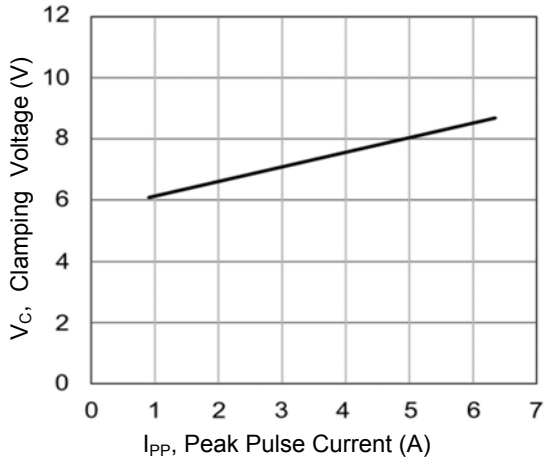
**Absolute Maximum Ratings** ( $T_A=25^{\circ}\text{C}$  unless otherwise specified)

Parameter	Symbol	Value	Unit
Maximum Reverse Peak Pulse Current	$I_{PP}$	8	A
ESD per IEC 61000-4-2 (Contact)	$V_{ESD}(\text{Contact})$	±30	KV
ESD per IEC 61000-4-2 (Air)	$V_{ESD}(\text{Air})$	±30	KV
Power Dissipation 200 mW	$P_D$	100	mW
Lead Temperature	$T_L$	260	°C
Junction Temperature	$T_J$	150	°C
Storage Temperature	$T_{STG}$	-55 to +150	°C

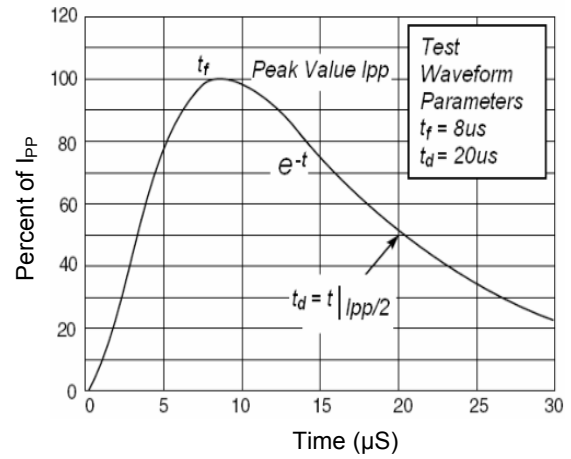
**Electrical Characteristics** ( $T_A=25^{\circ}\text{C}$  unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse Working Peak Voltage	$V_{RWM}$	-	-	-	3.3	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1\text{mA}$	4.5	5.2	6.5	V
Reverse Leakage Current	$I_R$	$V_{RWM}=3.3\text{V}$	-	-	200	nA
Clamping Voltage (IEC 61000-4-5)	$V_C$	$I_{PP}=1\text{A}, T_P=8/20\mu\text{S}$	-	-	7	V
		$I_{PP} \text{ MAX}, T_P=8/20\mu\text{S}$	-	-	9	V
Junction Capacitance	$C_J$	$V_R=0\text{V}, F=1\text{MHz}$	-	15	-	pF

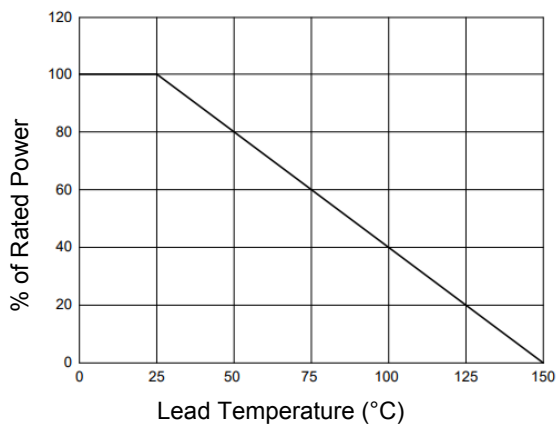
**Typical Characteristic Curves**



**Figure 1. Clamping Voltage vs Peak Pulse Current**

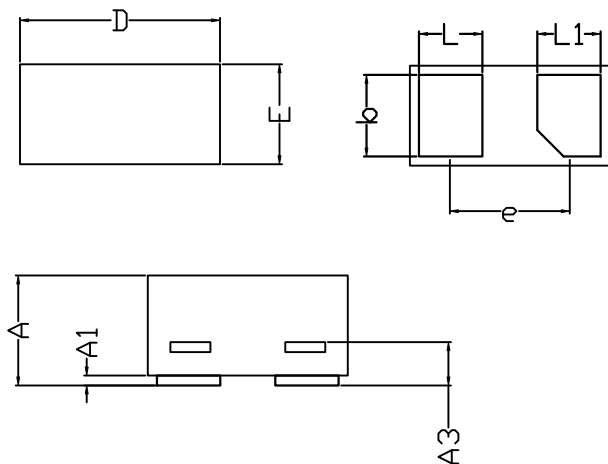


**Figure 2. Pulse Waveform-8/20  $\mu s$**



**Figure 3. Power Derating Curve**

**Package Outline Dimensions (DFN0603)**



Symbol	Dimensions in millimeters		
	Min	Nom	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	0.160	0.190	0.220
L1	0.160	0.190	0.220
e	0.355 BSC		

**Order Information**

MPN	Package	Marking	Quantity	HSF Status
GSEN3B150	DFN0603	B5	15,000pcs / Reel	RoHS compliant