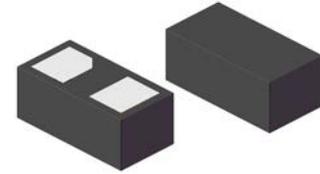
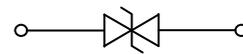


## Features

- 100Watts peak pulse power ( $t_p=8/20\mu s$ )
- Tiny DFN0603 package
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Medium capacitance ( $C_J=4pF$  typ.)
- Protection one data/power line to:  
 IEC 61000-4-2  $\pm 15kV$  contact  $\pm 20kV$  air  
 IEC 61000-4-4 (EFT) 40A (5/50ns)  
 IEC 61000-4-5 (Lightning) 2.5A (8/20 $\mu s$ )



DFN0603



Schematic Diagram

## Applications

- Audio line, speaker, headset, microphone protection
- Human interface devices (keyboard, touchpad, buttons)

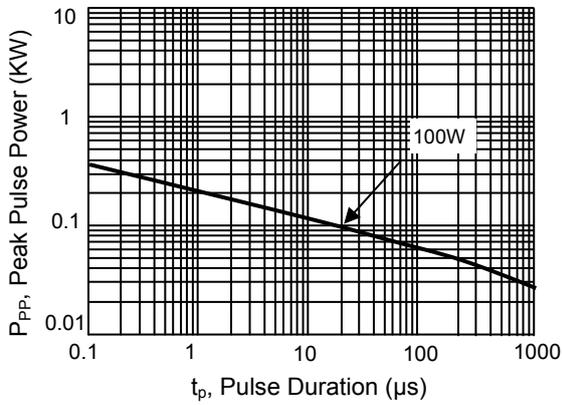
## Absolute Maximum Ratings ( $T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Max.	Unit
Peak Pulse Power ( $T_P=8/20\mu S$ )	$P_{PP}$	100	W
ESD Contact / Air Discharge (IEC-61000-4-2)	$V_{ESD}$	15/20	kV
Peak Pulse Current ( $T_P=8/20\mu S$ )	$I_{PP}$	2.5	A
Junction Temperature Range	$T_J$	-55 to +125	$^\circ C$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^\circ C$

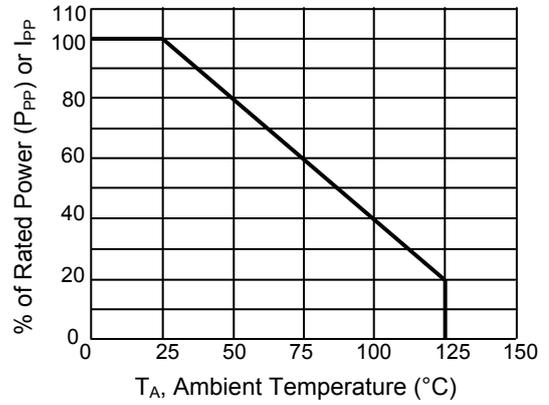
## Electrical Characteristics ( $T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	24	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	26.7	-	-	V
Reverse Leakage Current	$I_R$	$V_R=24V$	-	-	1	$\mu A$
Clamping Voltage (IEC 61000-4-5)	$V_C$	$I_{PP}=2.5A$	-	40	-	V
Junction Capacitance	$C_J$	$V_R=0V, f=1MHz$	-	4	-	pF

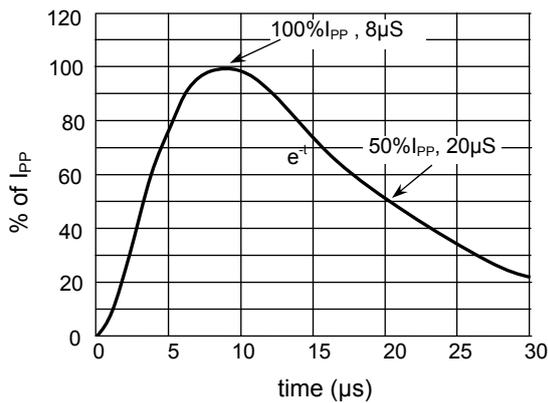
**Typical Characteristic Curves**



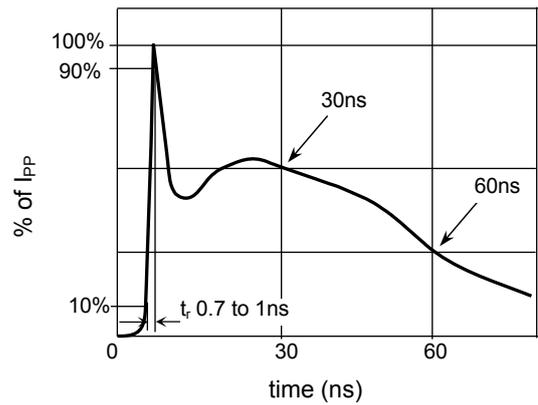
**Figure 1. Peak Pulse Power Rating Curve**



**Figure 2. Pulse Derating Curve**

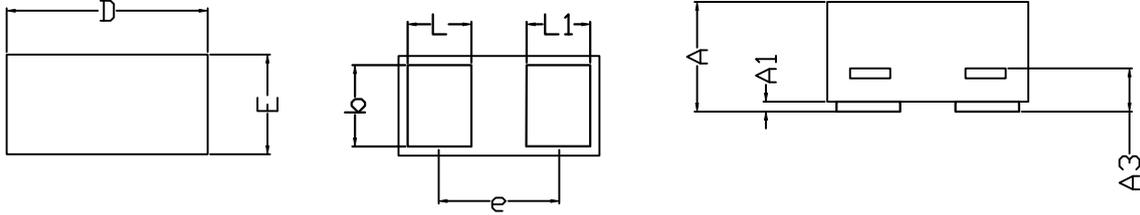


**Figure 3. Pulse Waveform - 8/20µs**



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

**Package Outline Dimensions (DFN0603)**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.230	0.330	0.009	0.013
A1	0.000	0.050	0.000	0.002
A3	0.102 REF		0.004 REF	
D	0.550	0.650	0.022	0.026
E	0.250	0.350	0.010	0.014
b	0.215	0.275	0.008	0.011
L	0.130	0.230	0.005	0.009
L1	0.130	0.230	0.005	0.009
e	0.355 BSC		0.014 BSC	

**Order Information**

Device	Package	Marking	Carrier	Quantity
GSEN24B040	DFN0603	V	Tape & Reel	10,000pcs / Reel