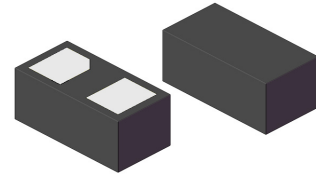
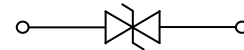


Features

- 150Watts peak pulse power ($t_p = 8/20\mu s$)
- DFN0603 package
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Medium capacitance ($C_J=5pF$ max.)
- 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) 5.5A (8/20 μs)
- RoHS compliant



DFN0603-X3



Applications

- Audio Line, Speaker, Headset, Microphone Protection
- Human Interface Devices (Keyboard, Touchpad, Buttons)

Schematic Diagram

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

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_p=8/20\mu s$)	P_{PP}	150	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	30	kV
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{PP}	5.5	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	Condition	Min	Typ	Max	Unit
Reverse Stand-Off Voltage	V_{RWM}		-	-	12	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	13.4	-	-	V
Reverse Leakage Current	I_R	$V_R=12V$	-	-	200	nA
Clamping Voltage (IEC 61000-4-5)	V_C	$I_{PP}=1A$	-	17	20	V
		$I_{PP}=5.5A$	-	23	26	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$	-	3.5	5	pF

Typical Characteristic Curves

Fig.1 Peak Pulse Power Rating Curve

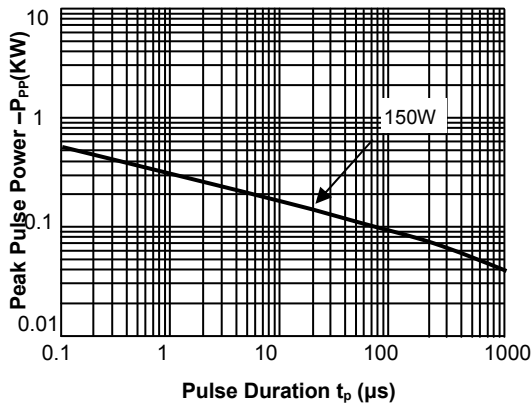


Fig.2 Pulse Derating Curve

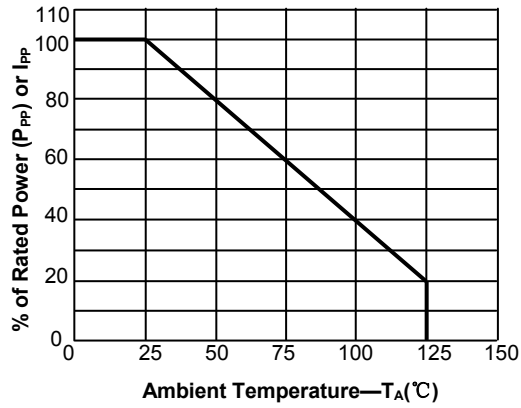


Fig.3 Pulse Waveform-8/20μs

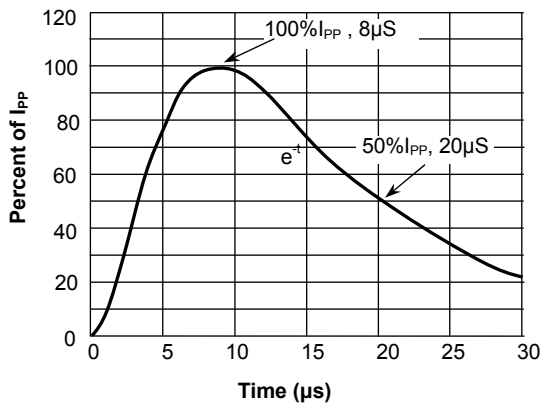
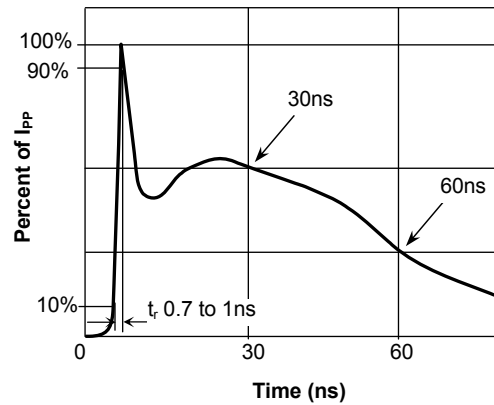
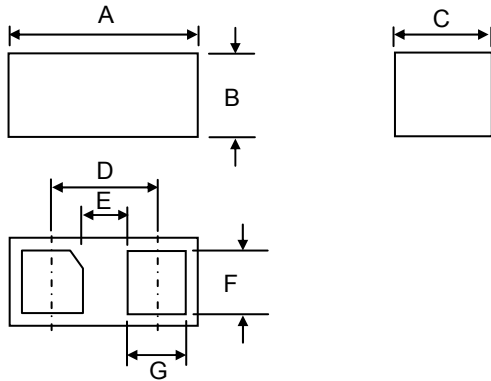


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)



Product Outline Dimensions

DFN0603-X3



Symbol	Dimensions in millimeters		
	Min	Nom	Max
A	0.585	0.610	0.635
B	0.270	0.290	0.310
C	0.285	0.310	0.335
F	0.210	0.230	0.250
G	0.170	0.190	0.210
D	0.340		
E	0.150		

Order Information

Device	Package	Marking	Quantity	HSF Status
GSES12VD0603-2B	DFN0603-X3	FM	15000pcs / Reel	RoHS Compliant