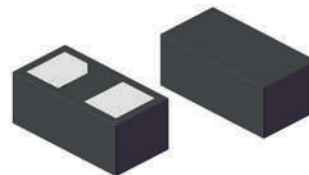
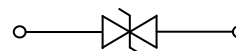


Features

- 24 Watts peak pulse power ($T_P=8/20\mu s$)
- DFN0603 package
- Snap-Back technology
- Low clamping voltage
- Low Leakage current
- Ultra low capacitance ($C_J=0.1pF$ typ.)
- ESD Protection for high-speed data lines to:
IEC 61000-4-2 $\pm 10kV$ contact $\pm 14kV$ air
IEC 61000-4-4 (EFT) 40A (5/50ns)
IEC 61000-4-5 (Lightning) 4.5A (8/20 μs)
- RoHS compliant



DFN0603



Schematic Diagram

Applications

- USB 3.0, USB 2.0, MHL
- HDMI 2.0, Display Port 1.3, eSATA
- Unified Display Interface (UDI)
- Digital Visual Interface (DVI)
- 1G/2.5G/5G/10G Ethernet

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}	24	W
Peak Pulse Current ($T_P=8/20\mu s$)	I_{PP}	4.5	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}	-	-	-	5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	5.5	7.8	-	V
Reverse Leakage Current	I_R	$V_R=5V$	-	0.01	0.1	μA
Trigger Voltage	V_T	$I_{PP}=4.5A$, $T_P=8/20\mu s$	-	9.8	-	V
Clamping Voltage	V_C	$I_{PP}=4.5A$, $T_P=8/20\mu s$	-	5.5	-	V
Junction Capacitance	C_J	$V_R=0V$, $f=1MHz$	-	0.1	0.15	pF

Typical Characteristic Curves

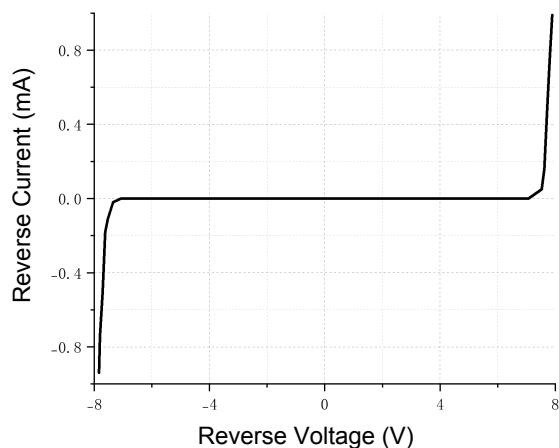


Figure 1. Breaking Voltage Curve

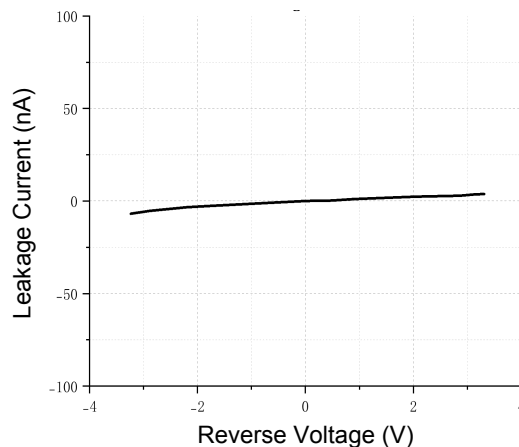


Figure 2. Leakage Current Curve

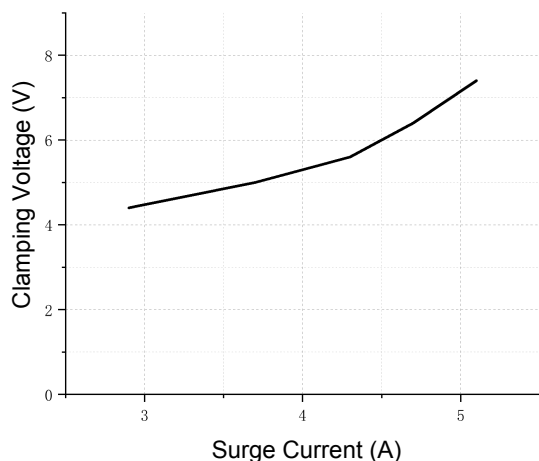


Figure 3. 8/20 μ s Surge Current Curve

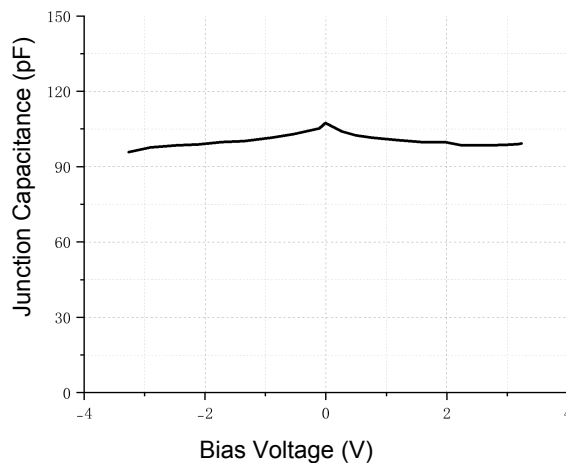


Figure 4. Junction Capacitance Curve

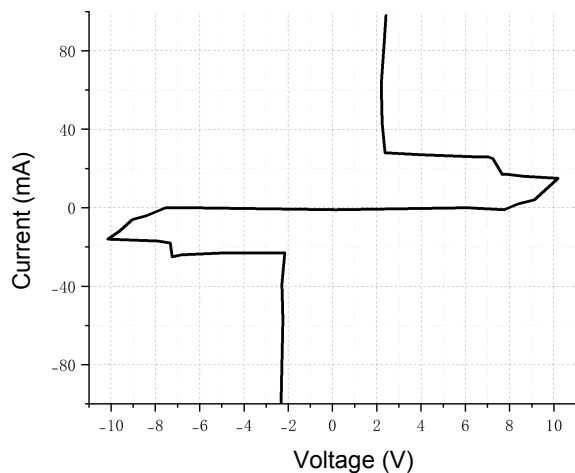


Figure 5. I-V Curve

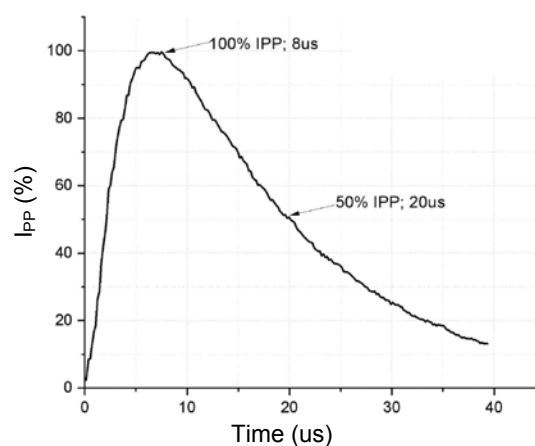
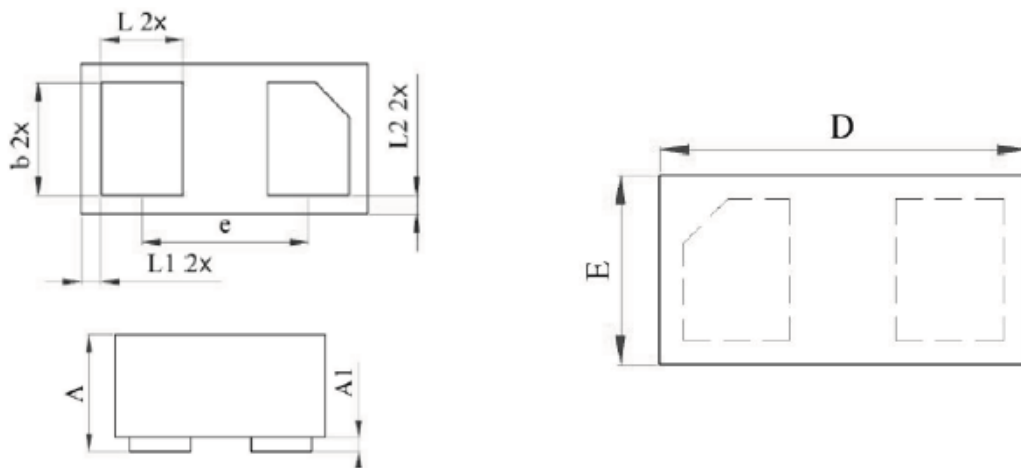


Figure 6. 8/20 μ s Pulse Waveform IEC 61000-4-5

Product Outline Dimensions (DFN0603)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.280	0.340	0.011	0.013
A1	-	0.050	-	0.002
D	0.590	0.640	0.023	0.025
E	0.290	0.340	0.011	0.013
b	0.215	0.265	0.008	0.010
L	0.155	0.205	0.006	0.008
L1	0.040 REF		0.002 REF	
L2	0.040 REF		0.002 REF	
e	0.360 BSC		0.014 BSC	

Order Information

Device	Package	Marking	Carrier	Quantity
GSEN5B0011	DFN0603	3BA	Tape & Reel	10,000pcs / Reel