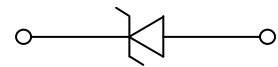


## Features

- 1120W peak pulse power ( $T_p=8/20\mu s$ )
- DFN1610 package
- Fast response time, typically  $< 1ns$
- Excellent clamping voltage
- Low leakage current
- IEC 61000-4-2  $\pm 30kV$  (Air) ESD protection
- IEC 61000-4-2  $\pm 30kV$  (Contact) ESD protection
- IEC 61000-4-5 80A (8/20us) SURGE protection
- IEC 61000-4-4 40A (5/50ns) EFT protection
- RoHS compliant



DFN1610



Schematic Diagram

## Applications

- USB Vbus
- Power Line
- Power Management

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

Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_p=8/20\mu s$ )	$P_{PP}$	1120	W
Peak Pulse Current ( $T_p=8/20\mu s$ )	$I_{PP}$	80	A
Operating Temperature	$T_J$	-55 To +125	$^\circ C$
Storage Temperature	$T_{STG}$	-55 To +150	$^\circ C$

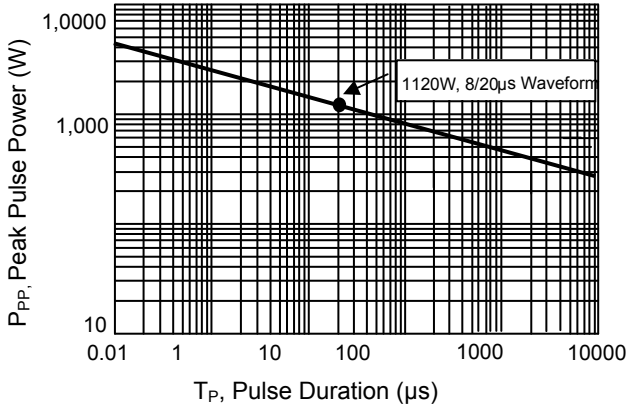
## Electrical Characteristics ( $T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	6.5	-	-	V
Reverse Leakage Current	$I_R$	$V_R=5V$	-	-	1.0	$\mu A$
Clamping Voltage <sup>1</sup>	$V_C$	$I_{PP}=80A$	-	14	-	V
Junction Capacitance	$C_J$	$V_R=0V, f=1MHz$	-	550	-	pF

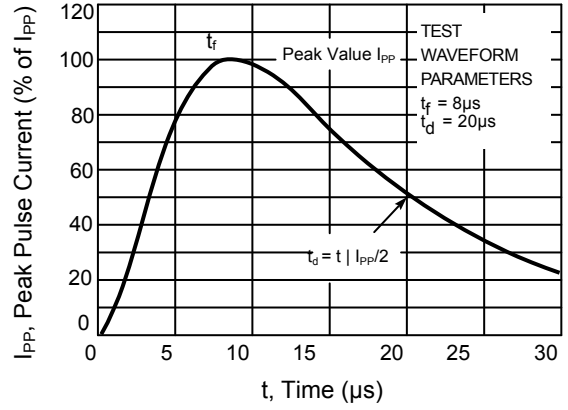
Note:

1. IEC61000-4-5

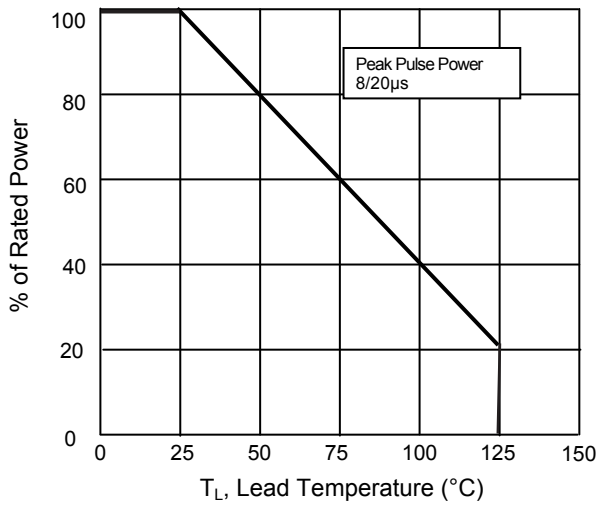
**Typical Characteristic Curves**



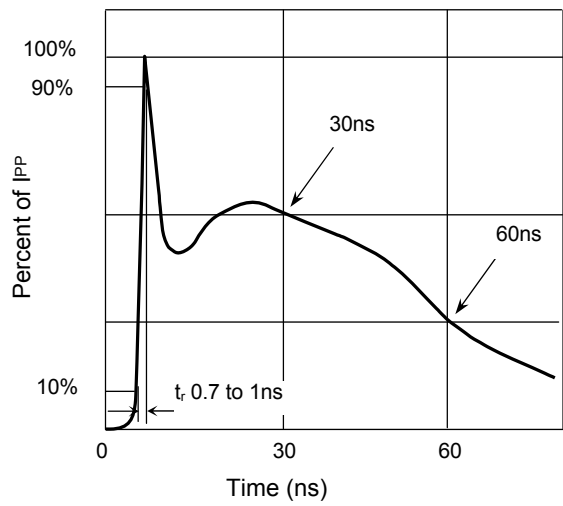
**Figure 1. Peak Pulse Power vs. Pulse Time**



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

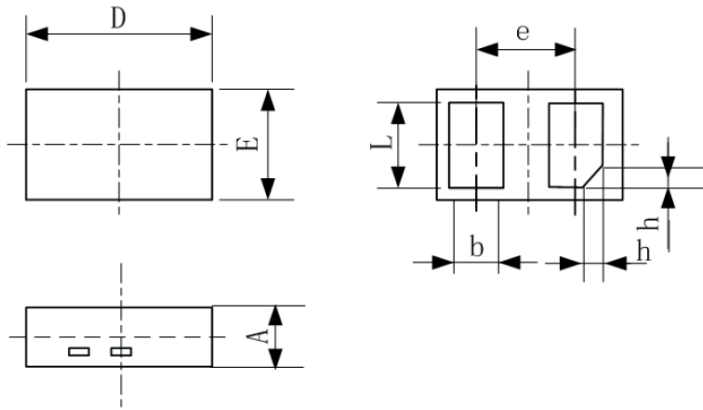


**Figure 3. Pulse Derating Curve**



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

**Package Outline Dimensions (DFN1610)**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.450	0.550	0.018	0.022
D	1.550	1.650	0.061	0.065
E	0.950	1.050	0.037	0.041
b	0.350	0.450	0.014	0.018
L	0.750	0.850	0.030	0.033
e	1.100 BSC		0.043 BSC	
h	0.150	0.250	0.006	0.010

**Order Information**

Device	Package	Carrier	Quantity	HSF Status
GSEY5U5500	DFN1610	Tape & Reel	10,000 pcs / Reel	RoHS Compliant