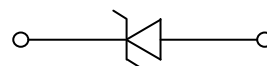


Features

- 2900W peak pulse power (tp=8/20μs)
- DFN1610 package
- Fast response time, typically<1 ns
- Excellent clamping voltage
- Low leakage current
- IEC 61000-4-2 ±30kV (Air) ESD protection
- IEC 61000-4-2 ±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°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	P _{PP}	2900	W
Peak Pulse Current (8/20μs)	I _{PP}	80	A
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

Electrical Characteristics (T_A=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Stand-Off Voltage	V _{RWM}	-	-	-	30	V
Reverse Breakdown Voltage	V _{BR}	I _T =1mA	32	-	-	V
Reverse Leakage Current	I _R	V _R =30V	-	-	0.5	μA
Clamping Voltage ¹	V _C	I _{PP} =80A	-	36	-	V
Junction Capacitance	C _J	V _R =0V, F=1MHz	-	193	-	pF

Notes:

1. IEC61000-4-5

Typical Characteristic Curves

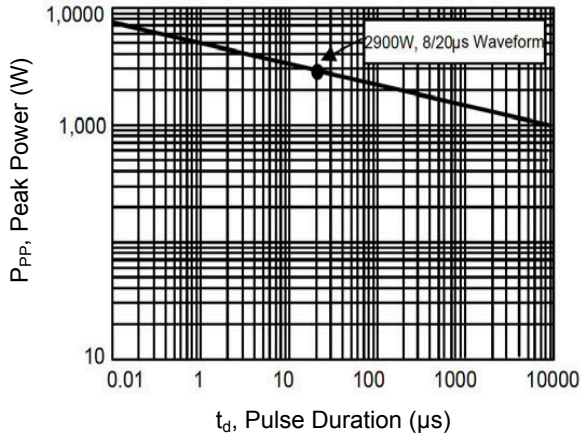


Figure 1. Peak Pulse Power vs. Pulse Time

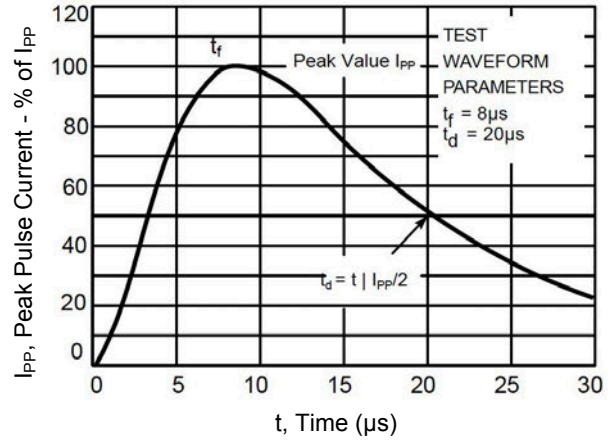


Figure 2. Pulse WaveForm-8/20 μs

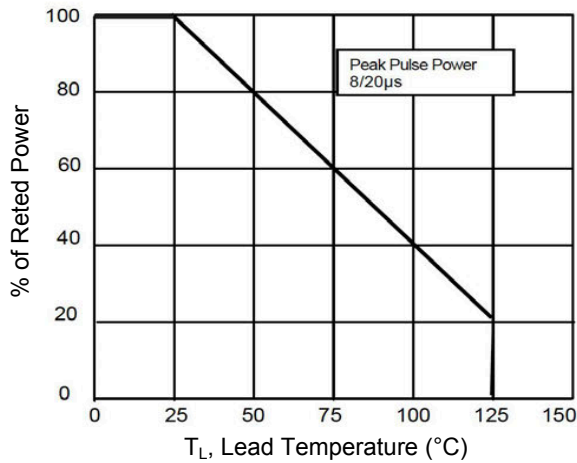


Figure 3. Power Derating Curve

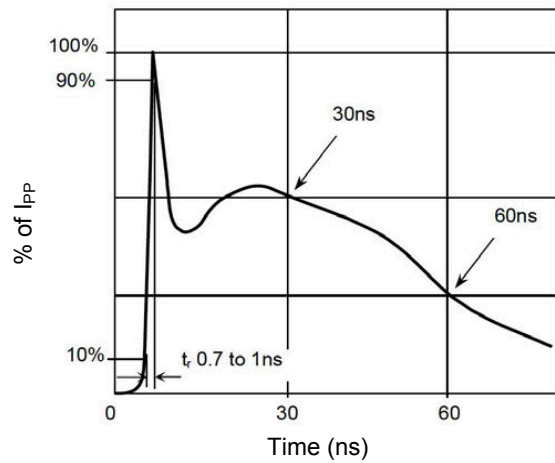
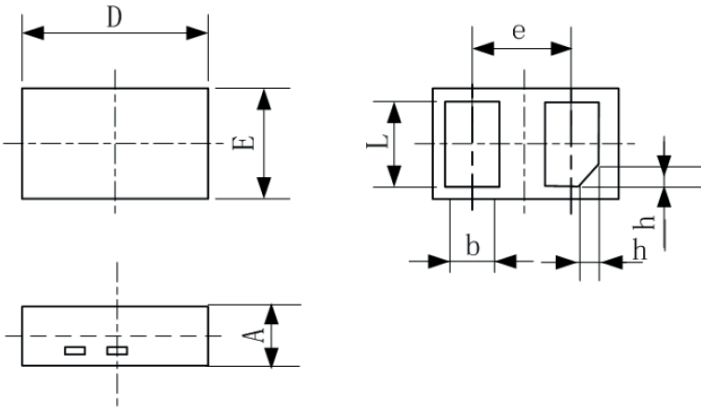


Figure 4. Pulse Waveform-ESD (IEC61000-4-2)

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	Marking	Carrier	Quantity
GSEY30U1930	DFN1610	HHW	Tape & Reel	10,000pcs / Reel