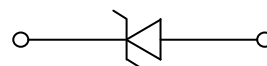


Features

- 1600W 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 70A (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}	1600	W
Peak Pulse Current (8/20μs)	I _{PP}	70	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}	-	-	-	15	V
Reverse Breakdown Voltage	V _{BR}	I _T =1mA	16.7	-	-	V
Reverse Leakage Current	I _R	V _{RWM} =15V	-	-	0.5	μA
Clamping Voltage	V _{CL}	I _{PP} =70A, t _p =8/20μs	-	23	-	V
Junction Capacitance	C _J	V _R =0V, F=1MHz	-	255	-	pF

Typical Characteristic Curves

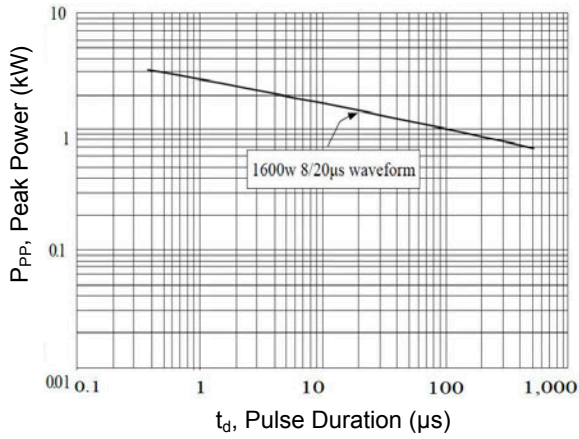


Figure 1. Peak Pulse Power vs. Pulse Time

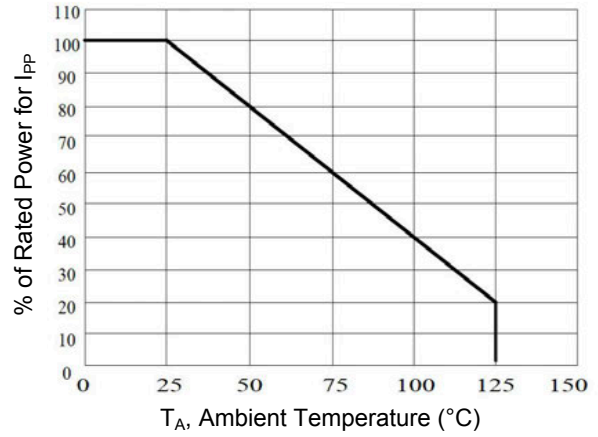


Figure 2. Power Derating Curve

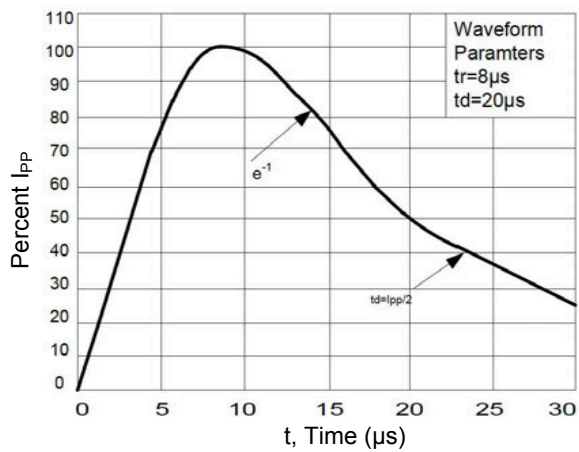


Figure 3. Pulse Waveform

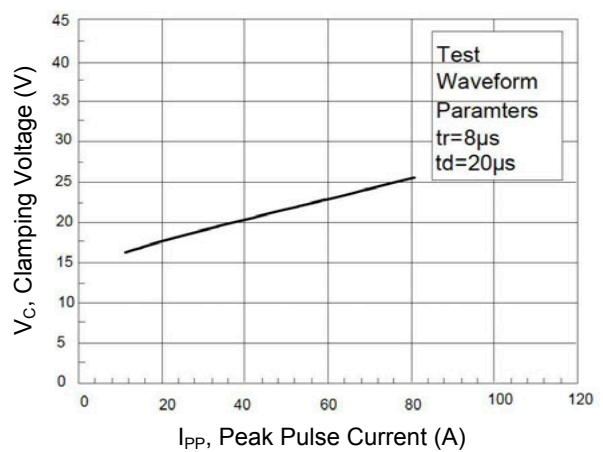
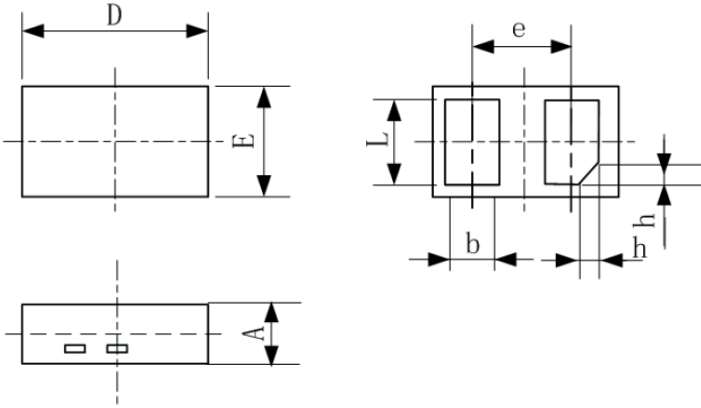


Figure 4. Clamping Voltage vs. Peak Pulse Current

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
GSEY15U2550	DFN1610	BHLW	Tape & Reel	10,000pcs / Reel