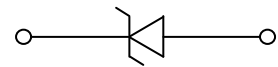


Features

- 2400W 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}	2400	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	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				24	V
Reverse Leakage Current	I_R	$V_{RWM}=24V$			1	μA
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	26.7			
Clamping Voltage	V_{CL}	$I_{PP}=80A, T_p=8/20\mu s$		28	30	V
ESD Clamping Voltage	V_C	$I_{TLP}=16A, T_p=100ns$		31		V
ESD Dynamic Resistance	R_{DYN}	$T_{AMB}=25^\circ C, T_p=100ns$		0.065		Ω
Junction Capacitance	C_J	$V_R=0V, F=1MHz$		218		pF

Typical Characteristic Curves

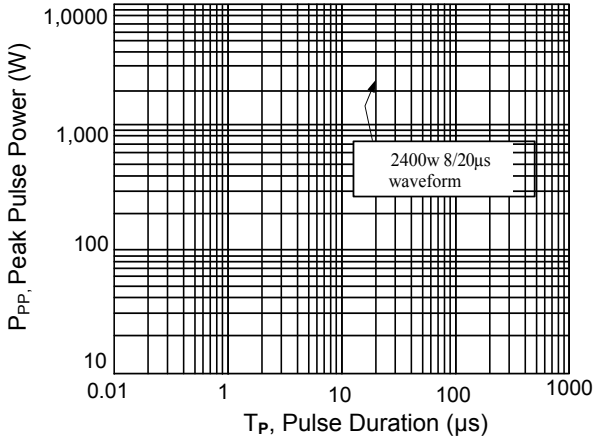


Figure 1. Peak Pulse Power vs. Pulse Time

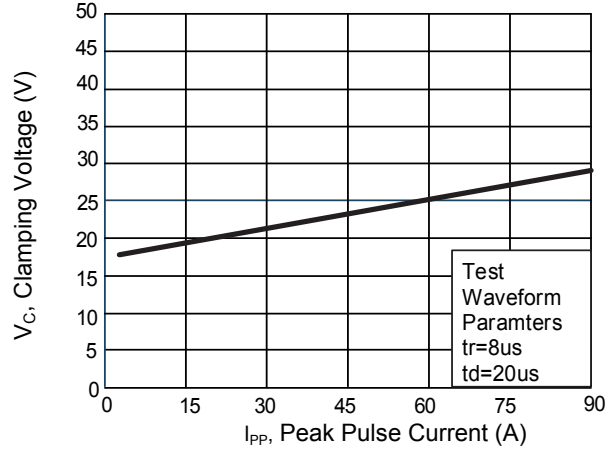


Figure 2. Reverse Clamping Voltage vs. Peak Pulse Current

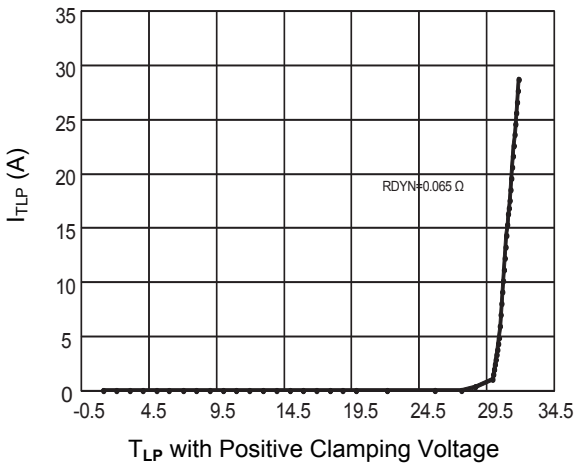


Figure 3. Positive Clamping Voltage (T_{LP})

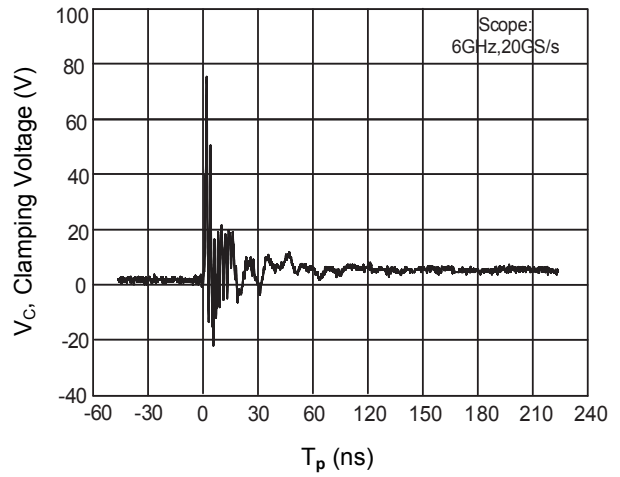
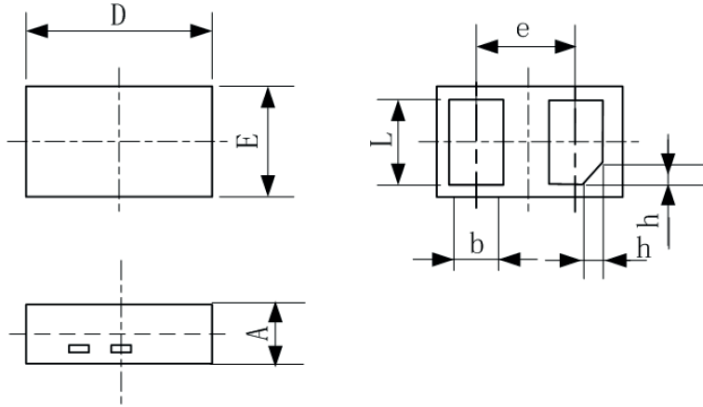


Figure 4. IEC61000-4-2: 8KV Positive Pulse

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
GSEY24U2180	DFN1610	CHW	Tape & Reel	10,000pcs / Reel