



Features

- 45Watts peak pulse power($t_p=8/20\mu s$)
- Uni-directional configurations
- Solid-state silicon-avalanche technology
- Low leakage current
- Low clamping voltage
- Low capacitance ($C_j=0.45pF$ typ, IO-IO)
- Transient protection for each line according to IEC61000-4-2 (ESD): $\pm 13kV$ (contact discharge)
 $\pm 15kV$ (air discharge)
- Low clamping voltage: $V_{CL} = 5.2V$ typ @ $I_{PP} = 16A$ (TLP)
- IEC 61000-4-5 (Lightning) 10A (8/20 μs)



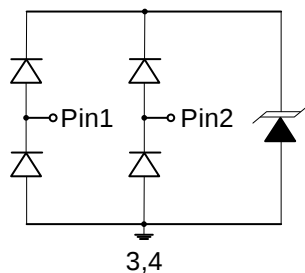
Applications

- Digital Visual Interface(DVI)
- MDDI Ports
- PCI Express
- Esata Interface
- HDMI Interface

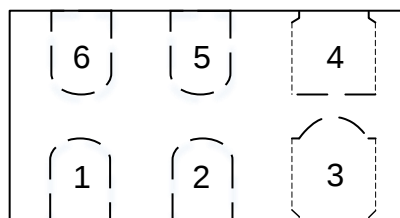
Mechanical Data

- DFN1610-6L package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

Schematic & PIN Configuration



Schematic



DFN1610-6L

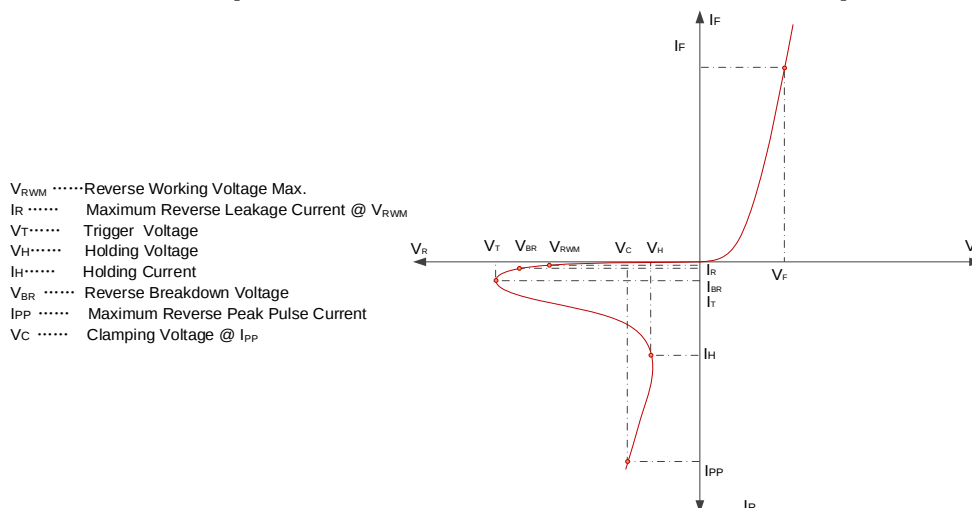
Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	45	Watts
Peak Pulse Current ($t_p = 8/20\mu s$) (Note1)	I_{pp}	10	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	15 13	kV
Lead Soldering Temperature	T_L	260(10seconds)	°C
Junction Temperature	T_J	-55 to + 125	°C
Storage Temperature	T_{stg}	-55 to + 125	°C

Electrical Characteristics

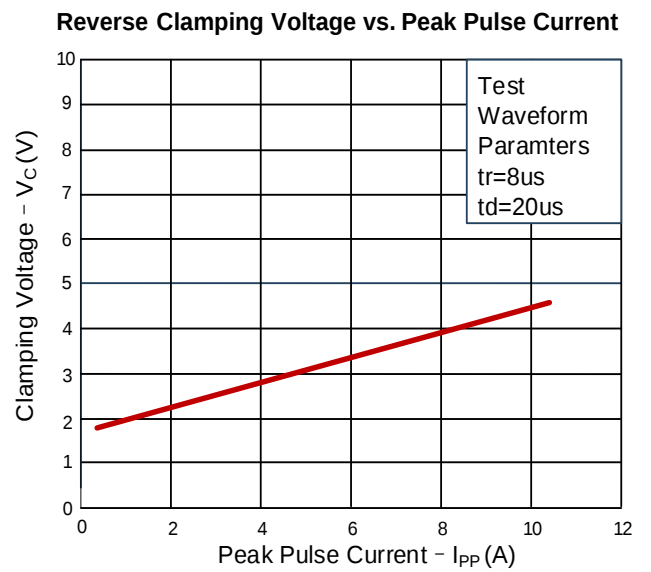
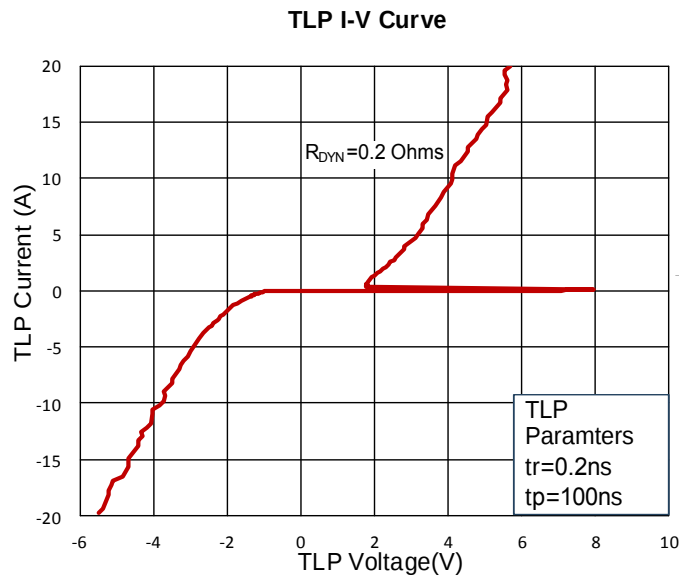
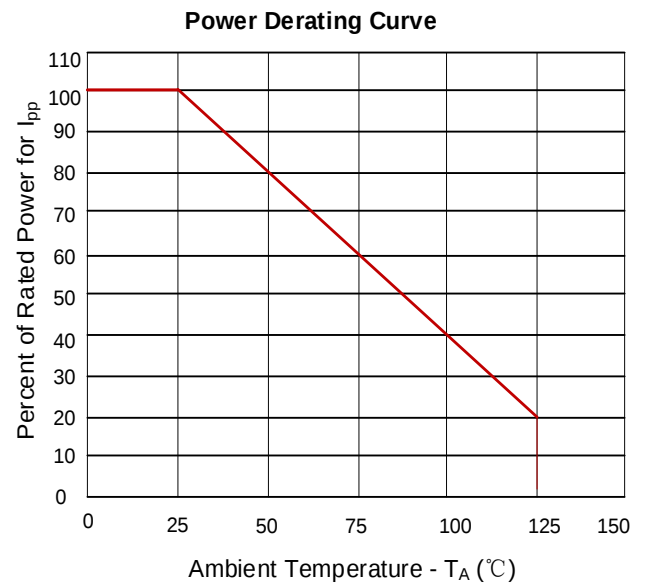
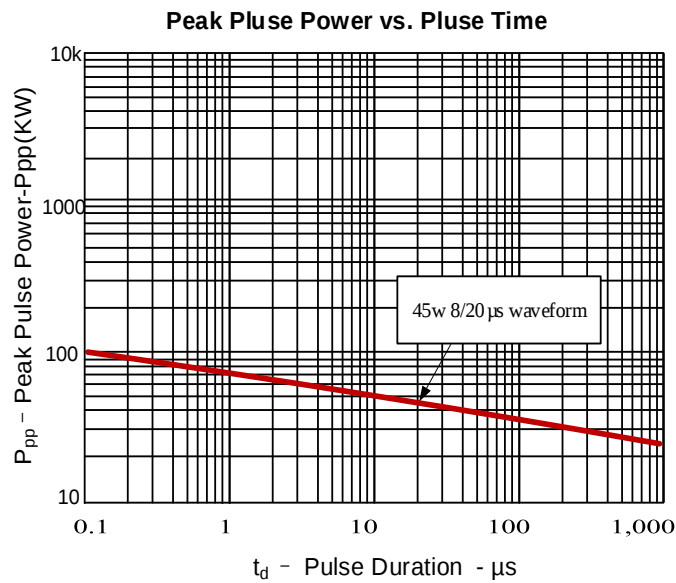
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	V_{RWM}				5.0	V
Reverse Leakage Current	I_R	$V_{RWM}=5.0V, T=25^\circ C$			0.5	μA
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	5.5			V
Holding Voltage	V_H		1.5	2.1	3.5	V
Clamping Voltage	V_C	$I_{PP}=10A, t_p=8/20\mu s$		4.5	5.5	V
ESD Clamping Voltage	V_{CL}	$I_{TLP}=4A, t_p=0.2/100ns$		2.8		V
ESD Clamping Voltage	V_{CL}	$I_{TLP}=16A, t_p=0.2/100ns$		5.2		V
ESD Dynamic resistance	R_{DYN}	$TLP=0.2/100ns$		0.2		Ω
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$ I/O-I/O		0.45		
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$ I/O-GND		1.0		pF

Electrical Parameters (TA = 25°C unless otherwise noted)

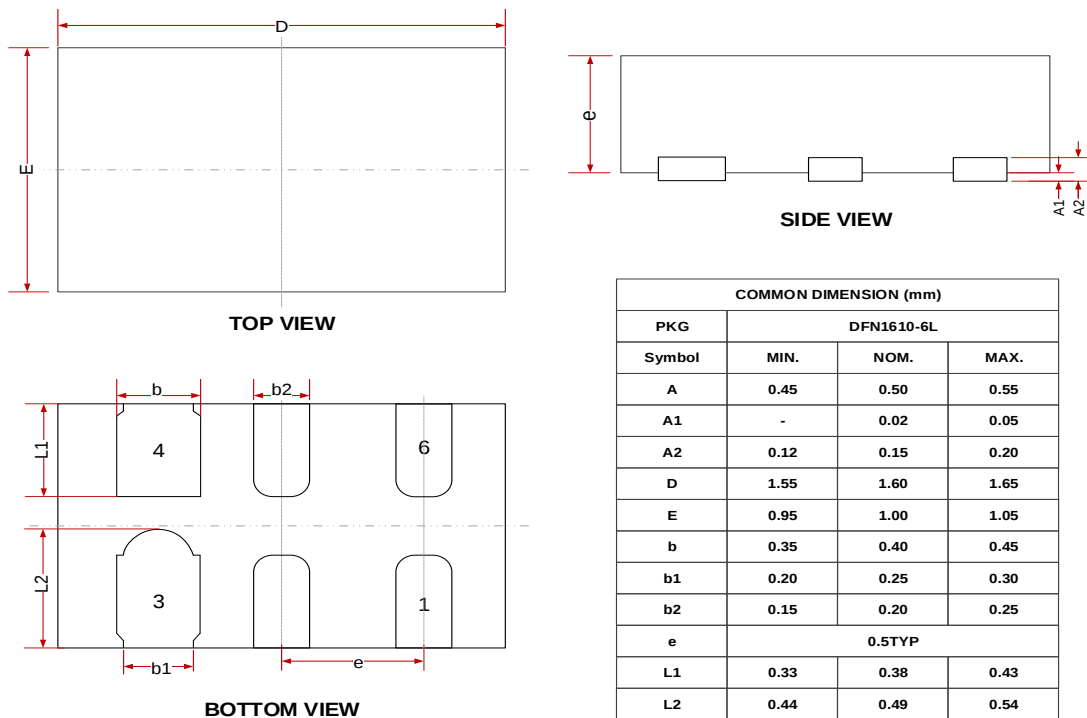


Note1: 8/20 μs pulse waveform.

Typical Characteristics



Outline Drawing-DFN1610-6L



Marking



Ordering Information

Part number	Delivery mode	Reel size	Base qty
SESF16U0516P	T/R	7 inch	3k/reel