

Features

- 1700 Watts Peak Pulse Power per Line ($t_p = 8/20\mu s$)
- Bidirectional Configuration
- Protects One Power or I/O Port
- ESD Protection > 40 kilovolts
- Low Clamping Voltages



IEC Compatibility (EN61000-4)

- IEC 61000-4-2 (ESD) : $\pm 30kV$ (air), $\pm 30kV$ (contact)
- IEC 61000-4-5(Surge): 100A, 8/20 μs

Applications

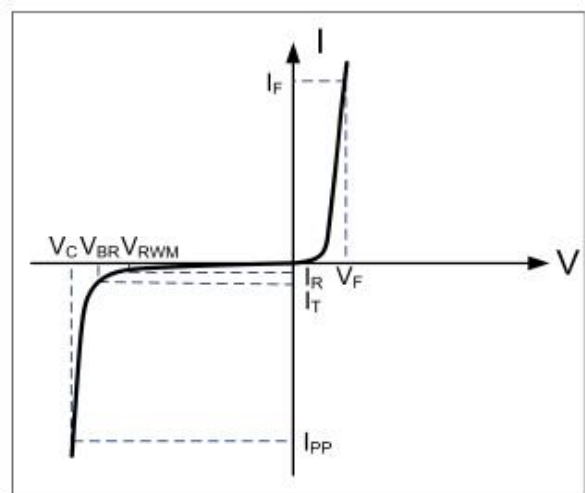
- Ethernet - 10/100/1000 Base T
- Cellular Phones
- Handheld - Wireless Systems
- Personal Digital Assistant (PDA)
- USB Interface



Electrical Parameters

Parameter	Symbol	Value	Units
Peak pulse power ($t_p=8/20\mu s$)	P_{PP}	1700	Watts
Operating Temperature	T_J	$-55^{\circ}C \sim 125^{\circ}C$	$^{\circ}C$
Storage Temperature	T_{STG}	$-55^{\circ}C \sim 150^{\circ}C$	$^{\circ}C$

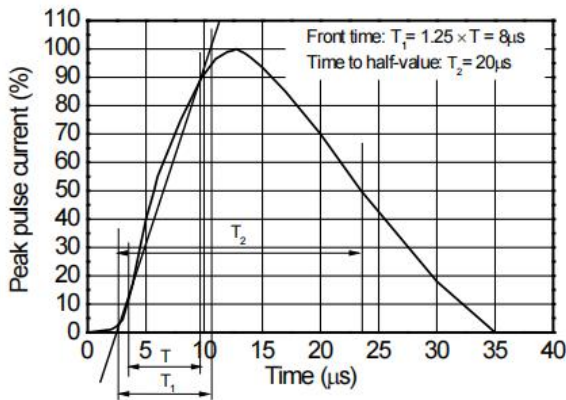
Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_R
I_T	Test Current
I_F	Forward Current
V_F	Forward Voltage @ I_F



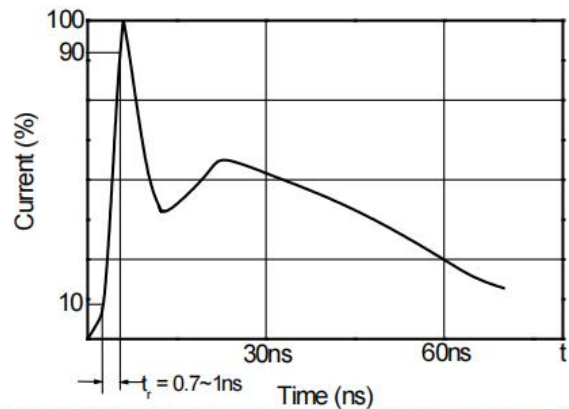
Ratings and characteristic curves ($T_A=25^{\circ}C$ unless otherwise noted)

Parameter	Symbol	Condition	Min	Max	Units
Reverse Stand-off Voltage	V_{RWM}	Pin2 to 1/Pin1 to 2		7.0	V
Reverse Breakdown Voltage	$V_{BR}(min)$	$I_Z=1mA$	7.5	9.5	V
Reverse Leakage Current	$I_R(max)$	@ V_{RWM}		0.2	μA
Clamping Voltage	V_C	$I_{PP}=100A$ $t_p=8/20\mu s$		17	V
Peak Pulse Current	I_{PP}	$t_p=8/20\mu s$	100		A
Junction Capacitance	$C_{I/O}$	Pin capacitance to GND.Vdc=0V,f=1MHZ		900	pf

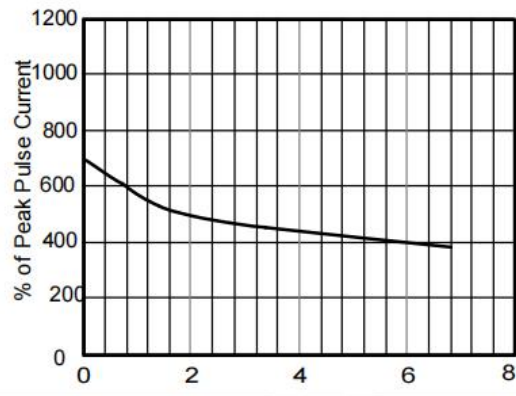
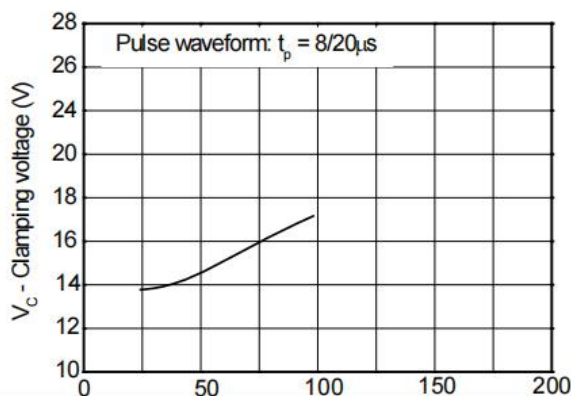
Typical Characteristics

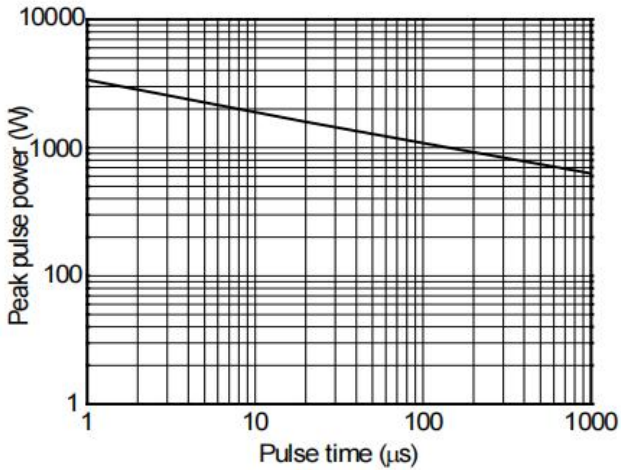


8/20 μs waveform per IEC61000-4-5

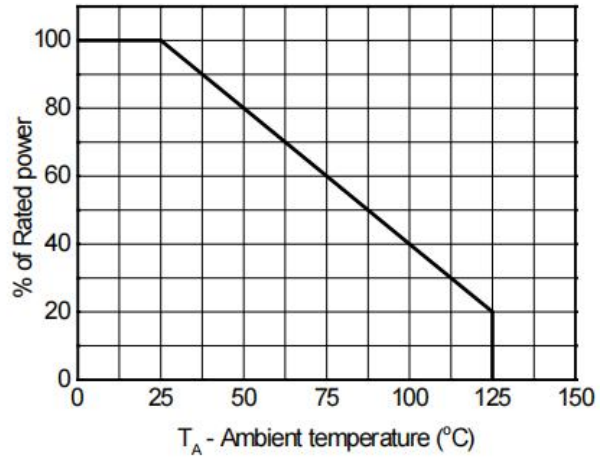


Contact discharge current waveform per IEC61000-4-2





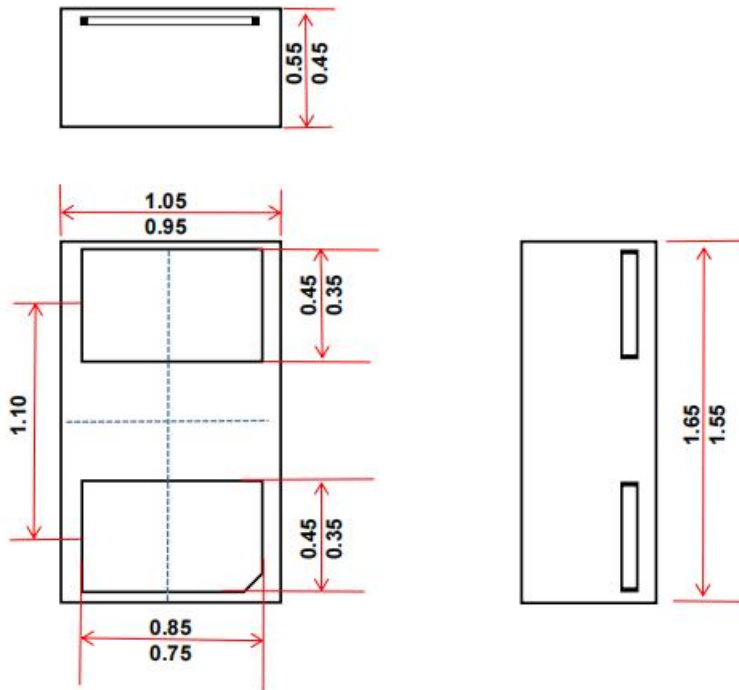
Non-repetitive peak pulse power vs. Pulse time



Power derating vs. Ambient temperature

Dimensions

DFN1610



Marking	Shipping
7P	3000/Tape&Reel