

**Features**

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



Marking	Shipping
7P	3000/Tape&Reel

**IEC Compatibility (EN61000-4)**

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

**Applications**

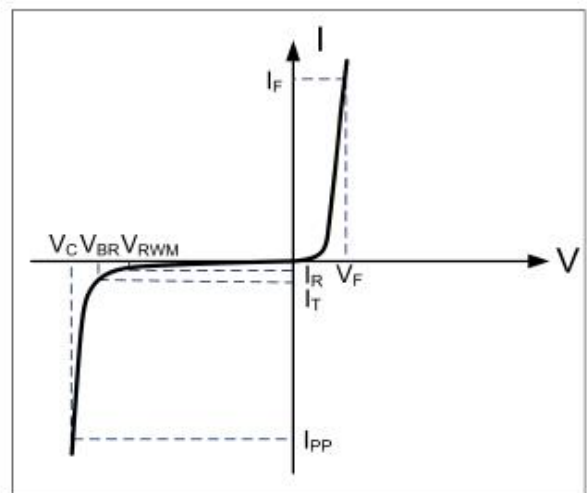
- Ethernet - 10/100/1000 Base T
- Cellular Phones
- Handheld - Wireless Systems
- Personal Digital Assistant (PDA)
- USB Interface



**Electrical Parameters**

Parameter	Symbol	Value	Units
Peak pulse power (tp=8/20us)	P <sub>PP</sub>	1700	Watts
Operating Temperature	T <sub>J</sub>	-55°C~125°C	°C
Storage Temperature	T <sub>STG</sub>	-55°C~150°C	°C

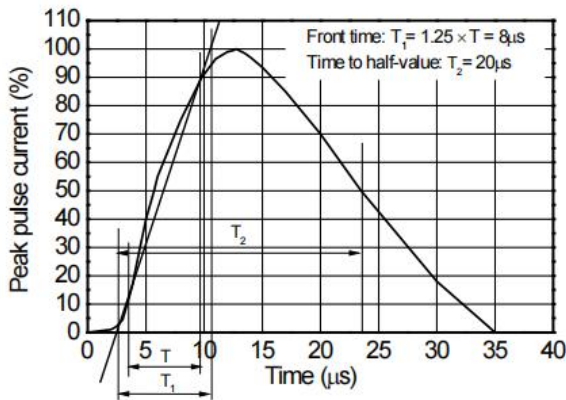
Symbol	Parameter
I <sub>PP</sub>	Maximum Reverse Peak Pulse Current
V <sub>C</sub>	Clamping Voltage @ I <sub>PP</sub>
V <sub>RWM</sub>	Working Peak Reverse Voltage
I <sub>R</sub>	Maximum Reverse Leakage Current @ V <sub>RWM</sub>
V <sub>BR</sub>	Breakdown Voltage @ I <sub>r</sub>
I <sub>r</sub>	Test Current
I <sub>F</sub>	Forward Current
V <sub>F</sub>	Forward Voltage @ I <sub>F</sub>



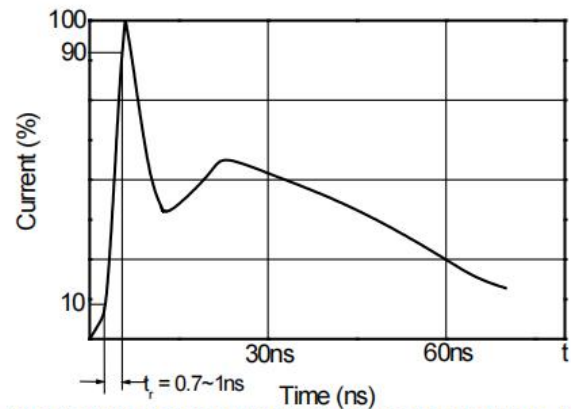
**Ratings and characteristic curves ( $T_A=25^{\circ}C$  unless otherwise noted)**

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	$\mu A$
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

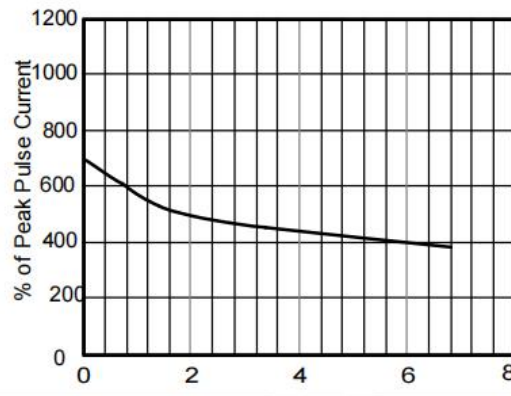
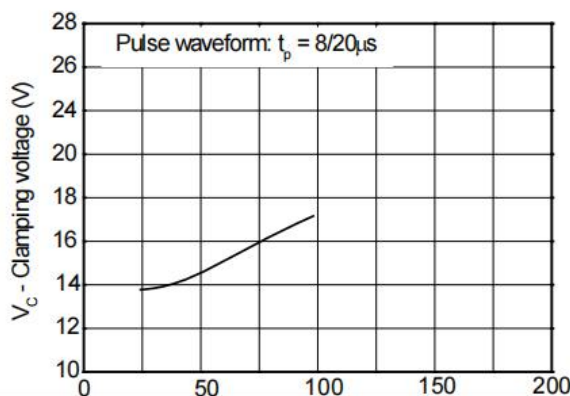
**Typical Characteristics**

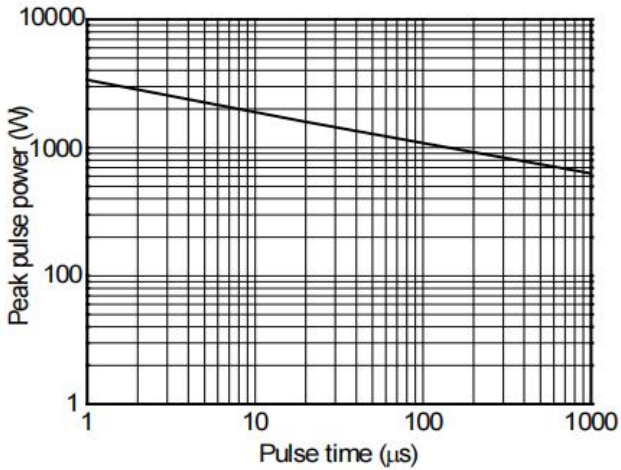


8/20 $\mu s$  waveform per IEC61000-4-5

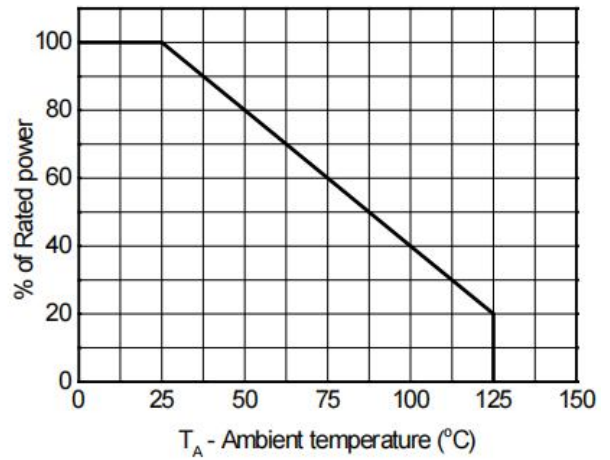


Contact discharge current waveform per IEC61000-4-2





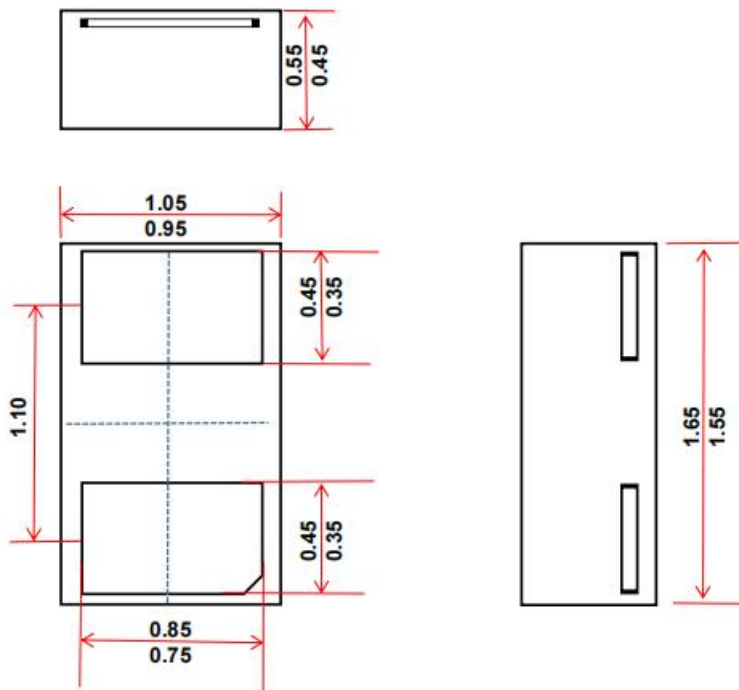
Non-repetitive peak pulse power vs. Pulse time



Power derating vs. Ambient temperature

**Dimensions**

**DFN1610**



Marking	Shipping
7P	3000/Tape&Reel