

**Features**

- 300 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



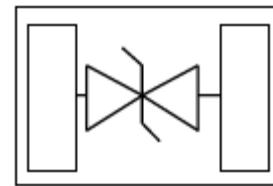
DFN1006

**IEC Compatibility (EN61000-4)**

- IEC 61000-4-2 (ESD) :±30kV (air), ±30kV (contact)
- IEC 61000-4-4 (EFT) :40A (5/50ns)
- IEC 61000-4-5(Surge): 8A, 8/20μs

**Applications**

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

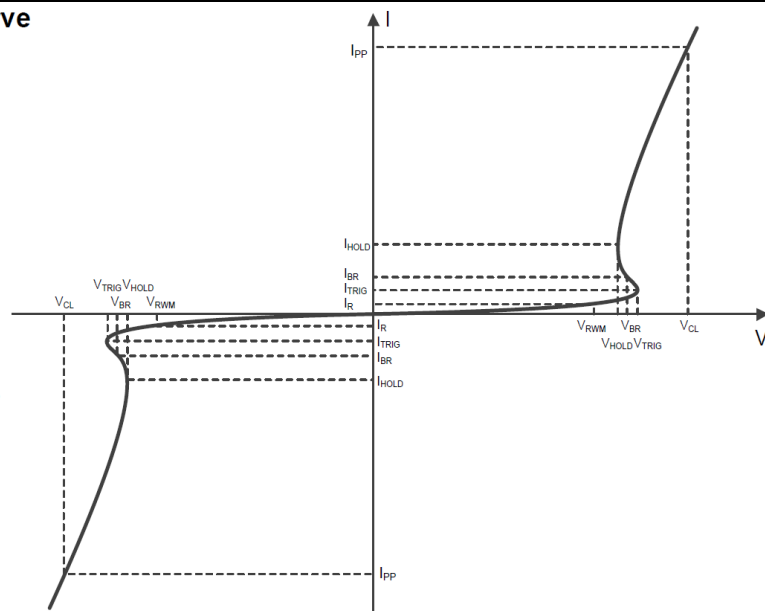


**Electrical Parameters**

Parameter	Symbol	Value	Units
Peak pulse power (tp=8/20us)	P <sub>PP</sub>	300	Watts
Operating Temperature	T <sub>J</sub>	-55 °C ~125 °C	°C
Storage Temperature	T <sub>STG</sub>	-55 °C ~150 °C	°C

Electrical performance curve

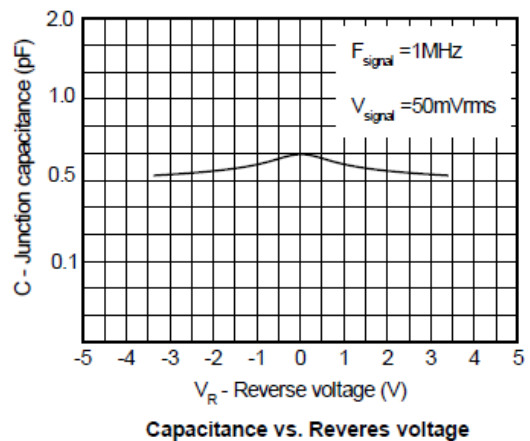
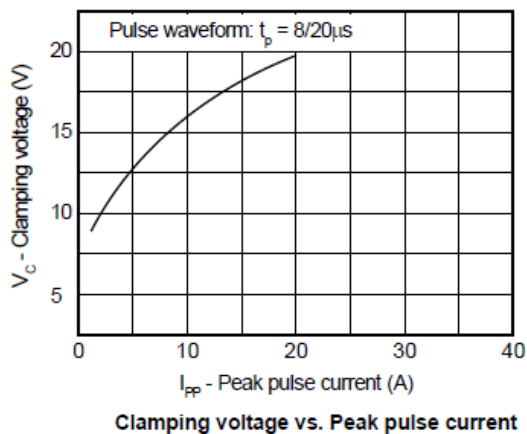
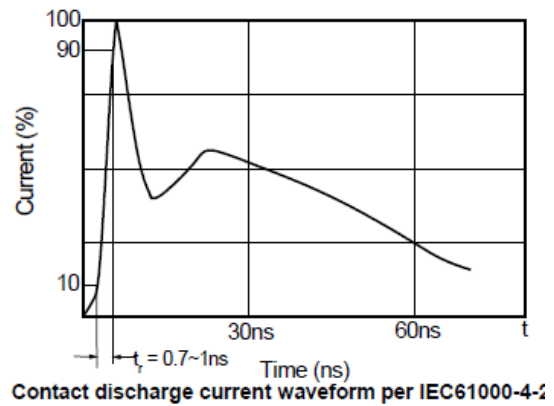
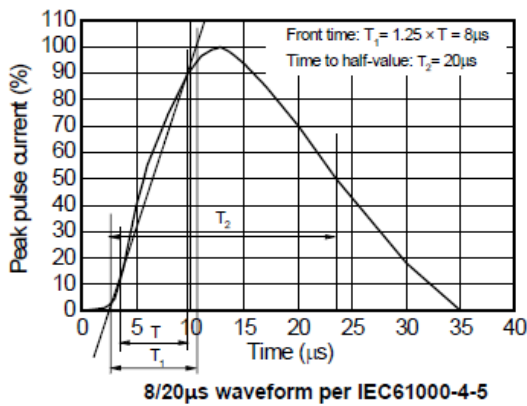
- V<sub>RWM</sub> Reverse stand-off voltage
- I<sub>R</sub> Reverse leakage current
- V<sub>CL</sub> Clamping voltage
- I<sub>PP</sub> Peak pulse current
- V<sub>TRIG</sub> Reverse trigger voltage
- I<sub>TRIG</sub> Reverse trigger current
- V<sub>BR</sub> Reverse breakdown voltage
- I<sub>BR</sub> Reverse breakdown current
- V<sub>HOLD</sub> Reverse holding voltage
- I<sub>HOLD</sub> Reverse holding current

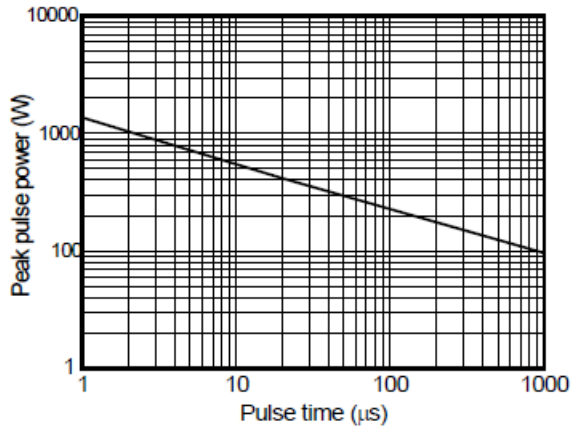


**Ratings and characteristic curves ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)**

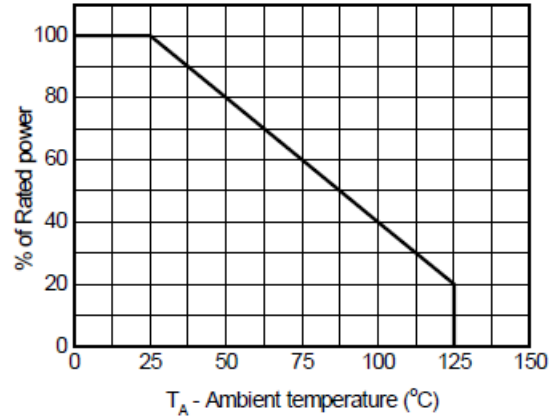
Parameter	Symbol	Condition	Min	Max	Units
Reverse Stand-off Voltage	$V_{RWM}$	Pin2 to 1/Pin1 to 2		24	V
Reverse Breakdown Voltage	$V_{BR}(\text{min})$	$I_Z=1\text{mA}$	25		V
Reverse Leakage Current	$I_R(\text{max})$	@ $V_{RWM}$		0.5	$\mu\text{A}$
Clamping Voltage	$V_C$	$I_{PP}=8\text{A}$ $t_p=8/20\mu\text{s}$		40	V
Peak Pulse Current	$I_{PP}$	$t_p=8/20\mu\text{s}$	8		A
Junction Capacitance	$C_{I/O}$	Pin capacitance to GND.Vdc=0V,f=1MHZ		45	pf

**Typical Characteristics**





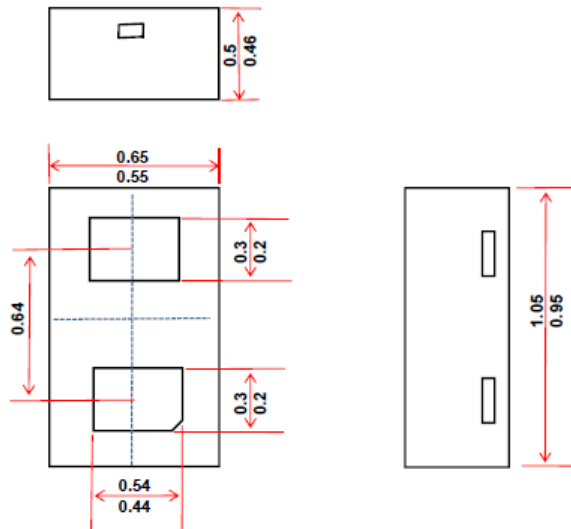
Non-repetitive peak pulse power vs. Pulse time



Power derating vs. Ambient temperature

## Dimensions

### DFN1006



Recommended Mounting Pad Layout Unit:mm

