

Features

- 450 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

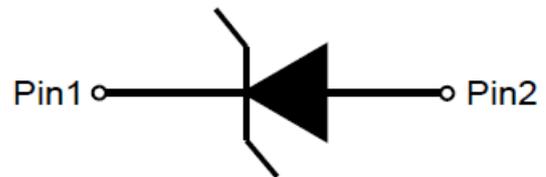


IEC Compatibility (EN61000-4)

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

Applications

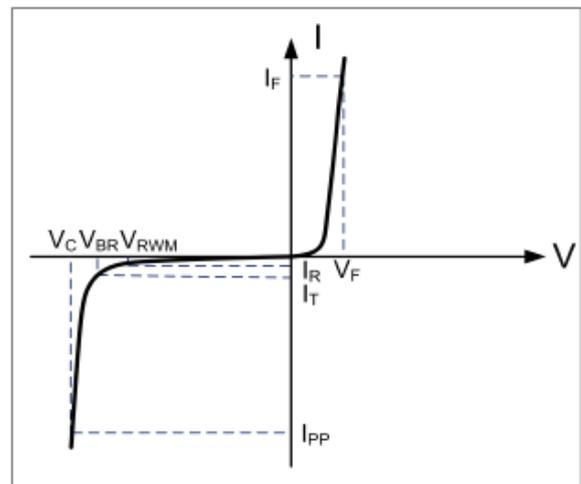
- Ethernet - 10/100/1000 Base T
- Cellular Phones
- Handheld - Wireless Systems
- Personal Digital Assistant (PDA)
- USB Interface



Electrical Parameters

Parameter	Symbol	Value	Units
Peak pulse power ($t_p=8/20\mu s$)	P_{PP}	450	Watts
Operating Temperature	T_J	$-55^{\circ}C \sim 125^{\circ}C$	$^{\circ}C$
Storage Temperature	T_{STG}	$-55^{\circ}C \sim 150^{\circ}C$	$^{\circ}C$

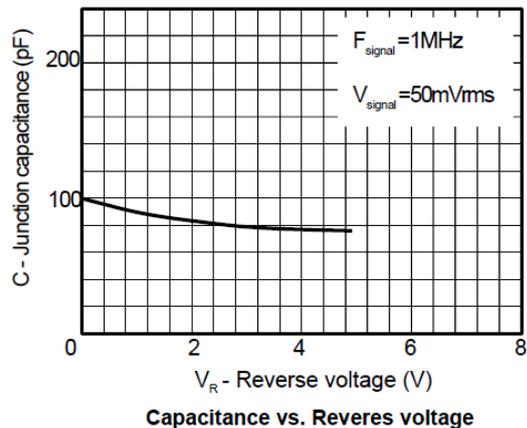
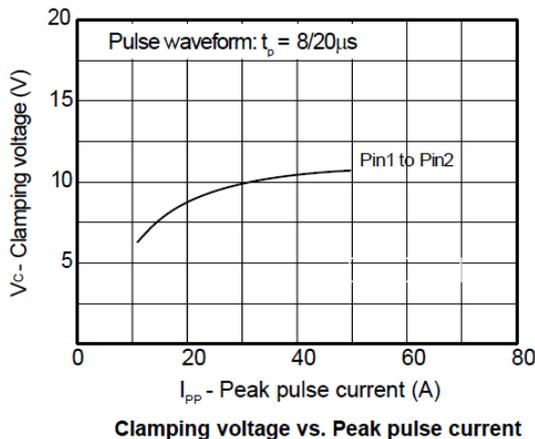
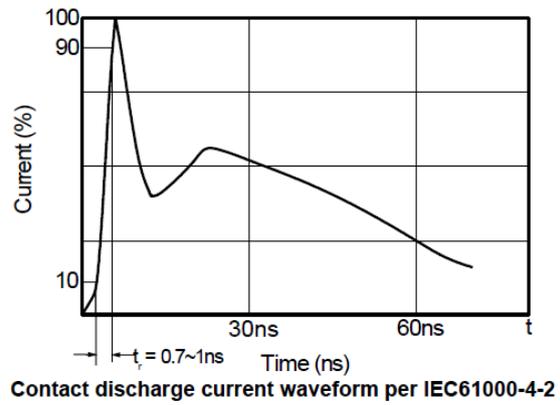
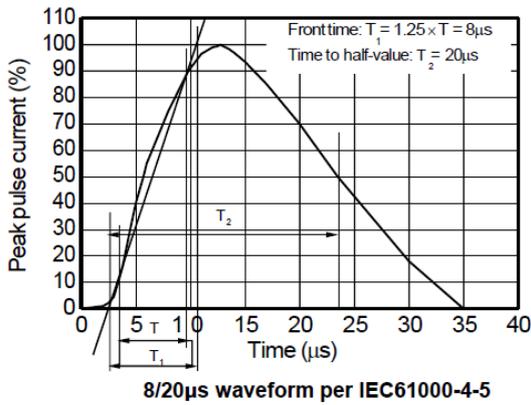
Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_R
I_T	Test Current
I_F	Forward Current
V_F	Forward Voltage @ I_F

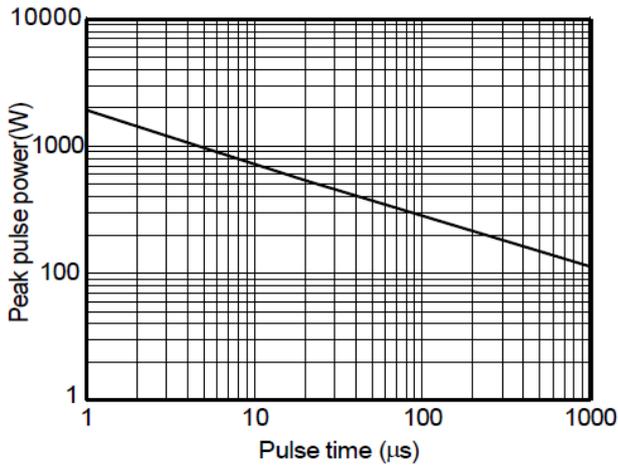


Ratings and characteristic curves ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

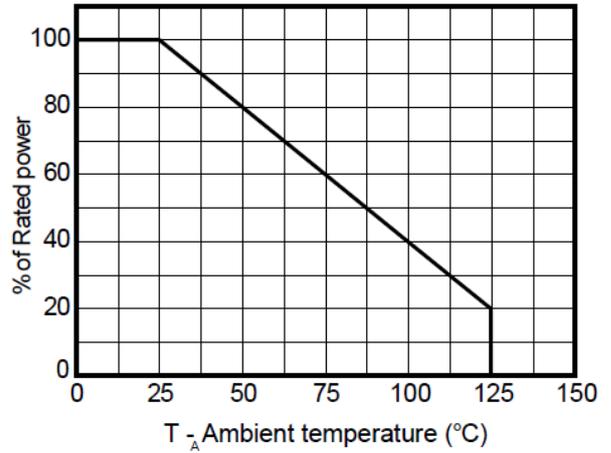
Parameter	Symbol	Condition	Min	Max	Units
Reverse Stand-off Voltage	V_{RWM}	Pin2 to 1/Pin1 to 2		5	V
Reverse Breakdown Voltage	$V_{BR}(\text{min})$	$I_Z=1\text{mA}$	5.5	7.5	V
Reverse Leakage Current	$I_R(\text{max})$	@ V_{RWM}		0.5	μA
Clamping Voltage	V_C	$I_{PP}=50\text{A}$ $t_p=8/20\mu\text{s}$		10.5	V
Peak Pulse Current	I_{PP}	$t_p=8/20\mu\text{s}$	50		A
Junction Capacitance	$C_{I/O}$	Pin capacitance to GND. $V_{dc}=0\text{V}$, $f=1\text{MHZ}$		150	pf

Typical Characteristics



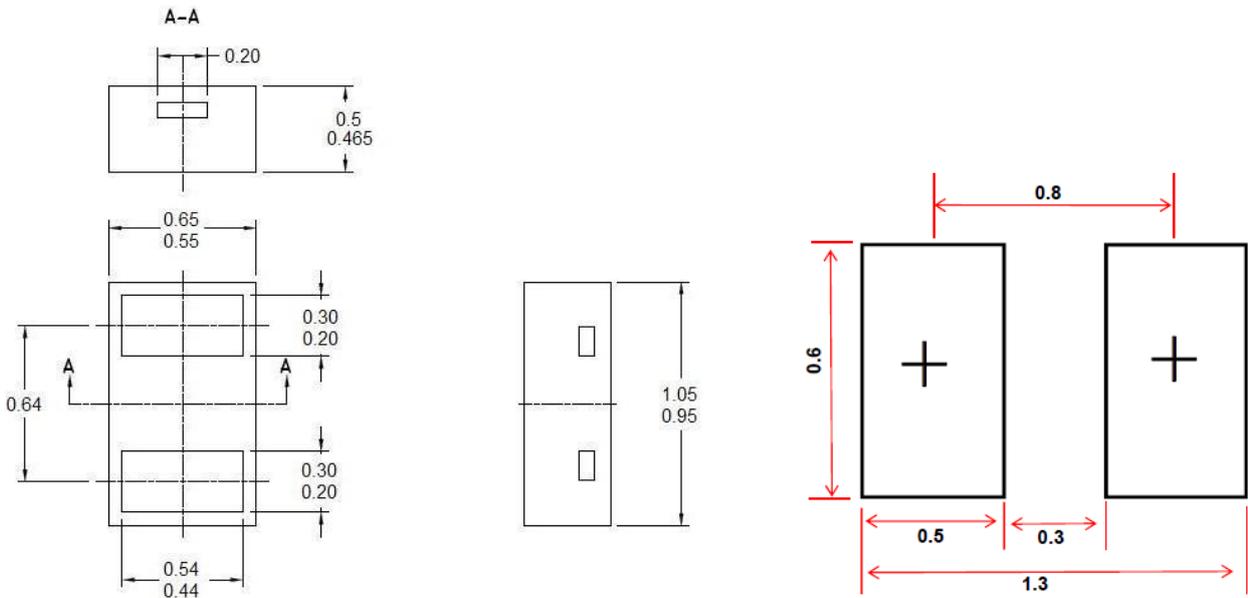


Non-repetitive peak pulse power vs. Pulse time



Power derating vs. Ambient temperature

Dimensions



Marking	Package	Shipping
5V	DFN1006-2L	10000/Tape&Reel