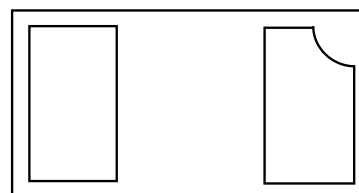
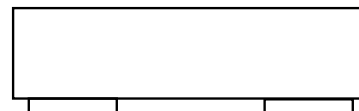


Feature

- 100W peak pulse power per line ($t_P = 8/20\mu s$)
- DFN1006-2L package
- Replacement for MLV(0402)
- Bidirectional configurations
- Response time is typically $< 1ns$
- Low clamping voltage
- RoHS compliant
- Transient protection for data lines to
IEC61000-4-2(ESD) $\pm 15KV$ (air), $\pm 8KV$ (contact);
IEC61000-4-4 (EFT) 40A (5/50ns)



■ Simplified outline(DFN1006-2L)

Mechanical Characteristics

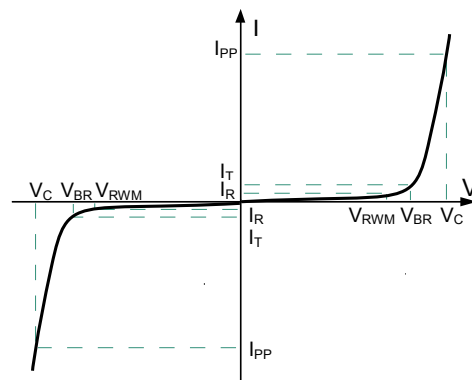
- Lead finish: 100% matte Sn(Tin)
- Mounting position: Any
- Qualified max reflow temperature: $260^{\circ}C$
- Device meets MSL 1 requirements
- Pure tin plating: $7 \sim 17 \mu m$
- Pin flatness: $\leq 3mil$

Applications

- Cellular phones
- Portable devices
- Digital cameras
- Power supplies

■ Electronics Parameter

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



■ Electrical characteristics per line@25°C (unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Peak Reverse Working Voltage	V_{RWM}				5	V
Breakdown Voltage	V_{BR}	$I_t = 1\text{mA}$	5.6		8.5	V
Reverse Leakage Current	I_R	$V_{RWM} = 5\text{V}$ $T = 25^\circ\text{C}$			1.0	μA
Maximum Reverse Peak Pulse Current	I_{PP}			5.5		A
Clamping Voltage	V_C	$I_{PP} = 1\text{A}$			10	V
Clamping Voltage	V_C	$I_{PP} = 3\text{A}$			15	V
Clamping Voltage	V_C	$I_{PP} = 5\text{A}$			21	V
Junction Capacitance	C_j	$V_R = 0\text{V}$ $f = 1\text{MHz}$		0.3		pF

■ Absolute maximum rating@25°C

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu\text{s}$)	P_{pp}	100	W
Operating Temperature	T_J	-55 to +150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 to +150	$^\circ\text{C}$

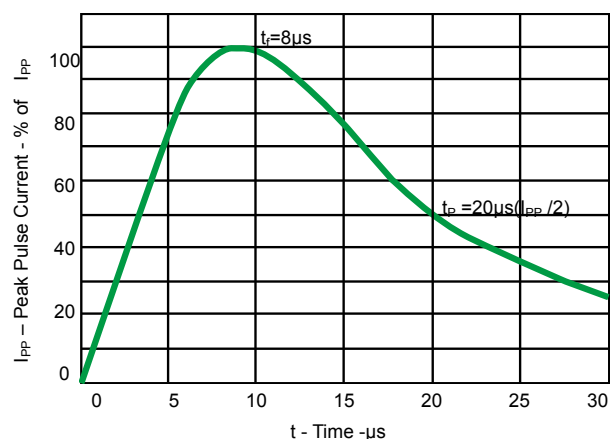


Fig 1. Pulse Waveform

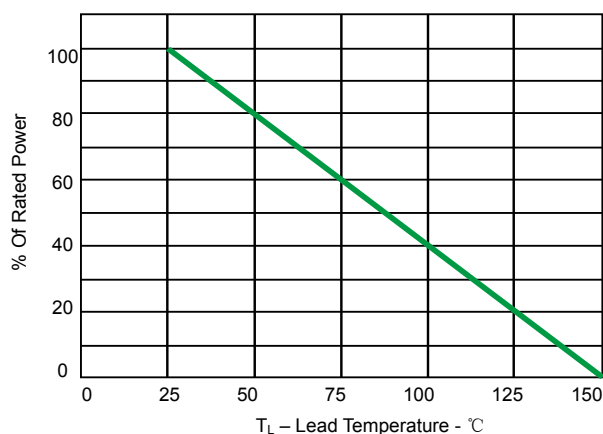


Fig 2. Power Derating Curve

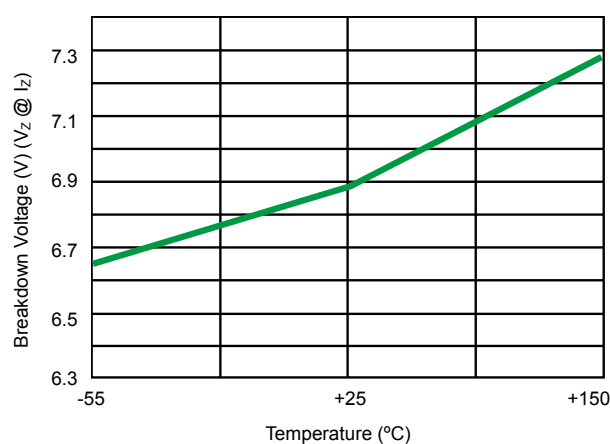


Fig 3. Typical Breakdown Voltage vs. Temperature

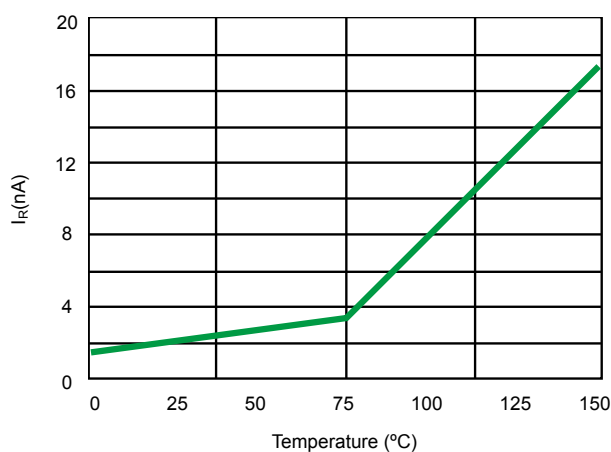


Fig 4. Typical Leakage Current vs. Temperature

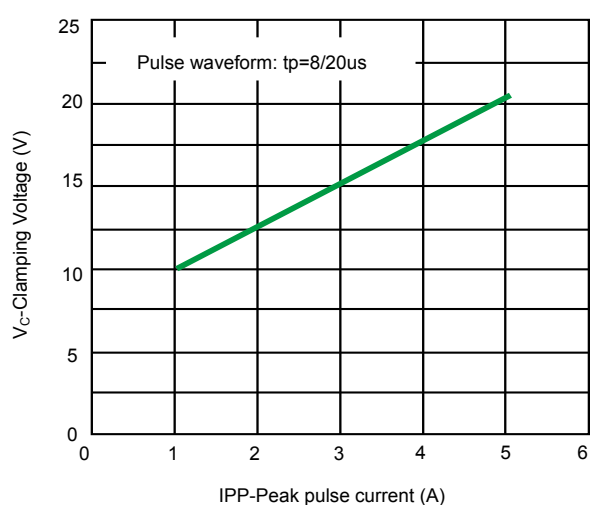


Fig 5. Clamping voltage vs. Peak pulse current

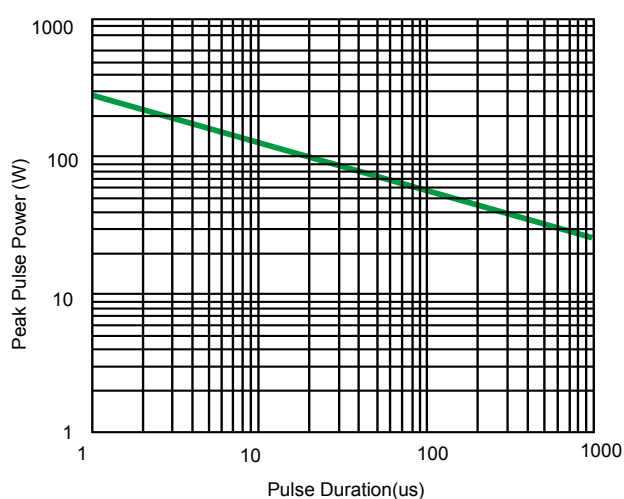
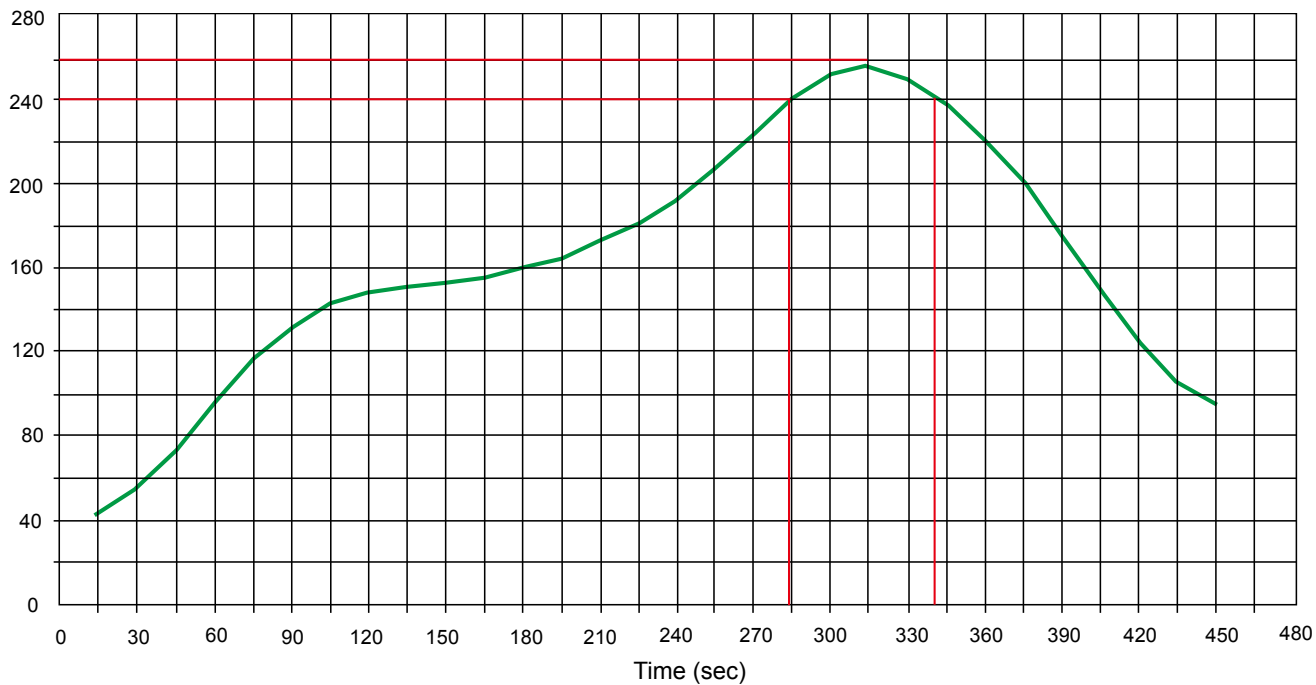
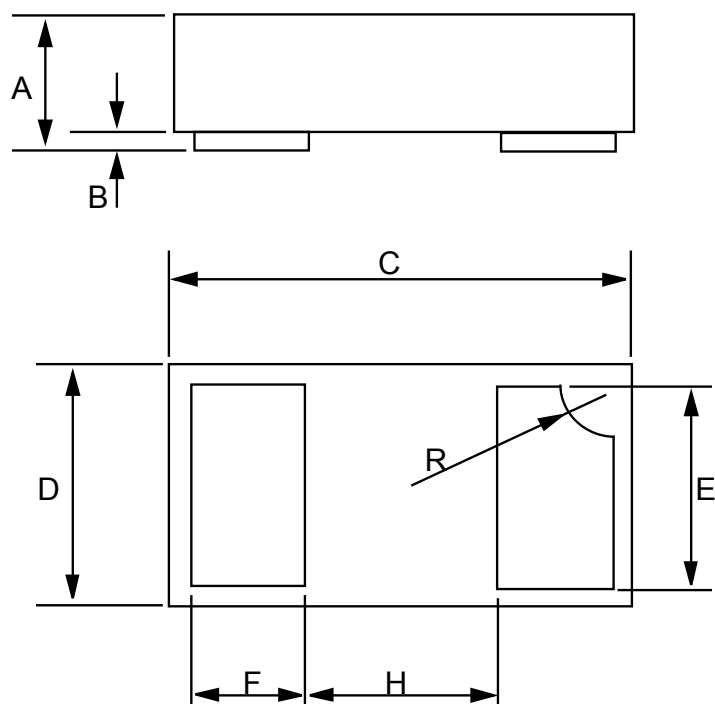


Fig 6. Non-Repetitive Peak Pulse Power vs. Pulse time

■ Solder Reflow Recommendation

Peak Temp=257°C, Ramp Rate=0.802deg. °C/sec



Package Outline
DFN1006-2L


Dim	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.013	0.015	0.34	0.40
B	0.000	0.002	0.00	0.05
C	0.037	0.042	0.95	1.075
D	0.021	0.026	0.55	0.675
E	0.017	0.021	0.45	0.55
F	0.007	0.011	0.20	0.30
H	0.015Typ.		0.40Typ.	
R	0.001	0.005	0.05	0.15

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