

Features

- Small Body Outline Dimensions
- Protects one I/O line
- Working Voltage: 15 V
- Low Leakage Current

Mechanical Characteristics

- DFN1006-2L package
- Marking : Marking Code
- Packaging : Tape and Reel per EIA 481
- RoHS Compliant

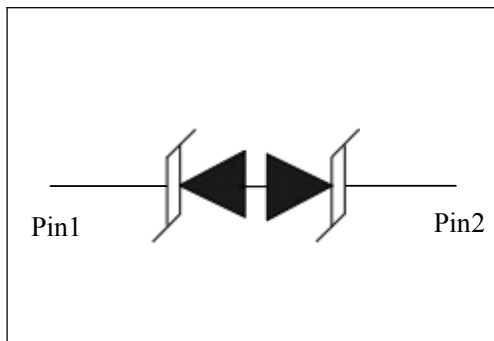
Applications

- Cellular Handsets & Accessories
- Personal Digital Assistants (PDAs)
- Notebooks & Handhelds
- Portable Instrumentation
- Digital Cameras

IEC COMPATIBILITY (EN61000-4)

- IEC 61000-4-2 (ESD) $\pm 30\text{kV}$ (air), $\pm 30\text{kV}$ (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 12A (8/20 μs)

Schematic & PIN Configuration

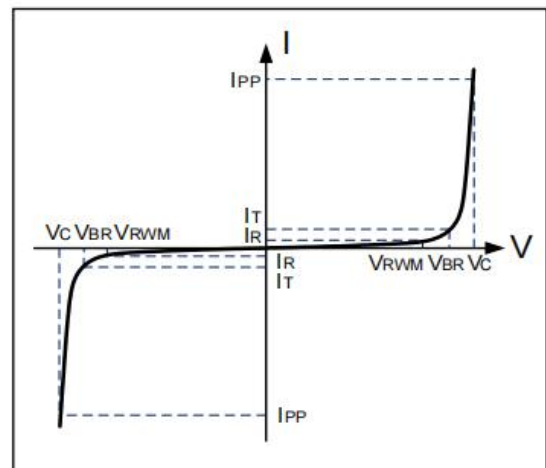


Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	PPP	360	Watts
Peak Pulse Current ($t_p = 8/20\mu s$)	IPP	12	A
Operating Temperature	TJ	-55 to + 125	°C
Storage Temperature	TSTG	-55 to +150	°C

Electrical Parameters

Symbol	Parameter
IPP	Reverse Peak Pulse Current
Vc	Clamping Voltage @ IPP
VRWM	Reverse Stand-Off Voltage
IR	Reverse Leakage Current @ VRWM
VBR	Breakdown Voltage @ IT
IT	Test Current



Electrical Characteristics

Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	VRWM				15	V
Reverse Breakdown Voltage	VBR	IT=1mA	16.7			V
Reverse Leakage Current	IR	VRWM=15V			100	nA
Clamping Voltage	VC	IPP=12A, tp=8/20μs		27.5	30	V
ESD Clamping Voltage ¹	VC	IPP = 4A tp = 0.2/100ns		20.5		V
ESD Clamping Voltage ¹	VC	IPP = 16A tp = 0.2/100ns		21.6		V
Dynamic Resistance ^{1,2}	RDYN	TLP=0.2/100ns		0.09		Ω
Junction Capacitance	Cj	VR = 0V, f = 1MHz		40	50	pF

- Note:**
- 1、 TLP Setting : tp=100ns, tr=0.2ns, ITLP and VTLP sample window:t1=70ns to t2=90ns.
 - 2、 Dynamic resistance calculated from IPP=4A to IPP=16A using "Best Fit"

Typical Characteristics

Figure 1: Peak Pulse Power Vs Pulse Time

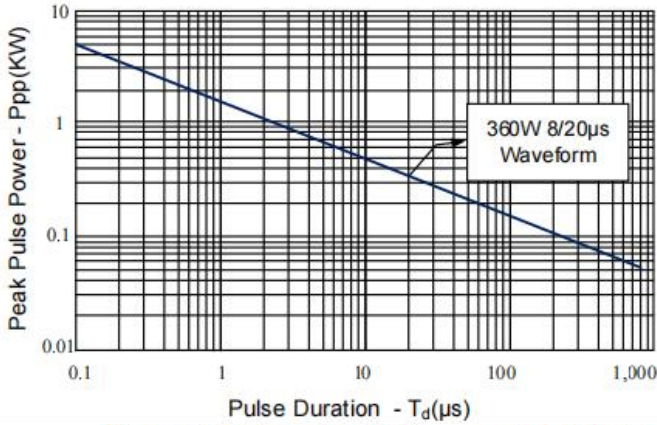


Figure 2: Power Derating Curve

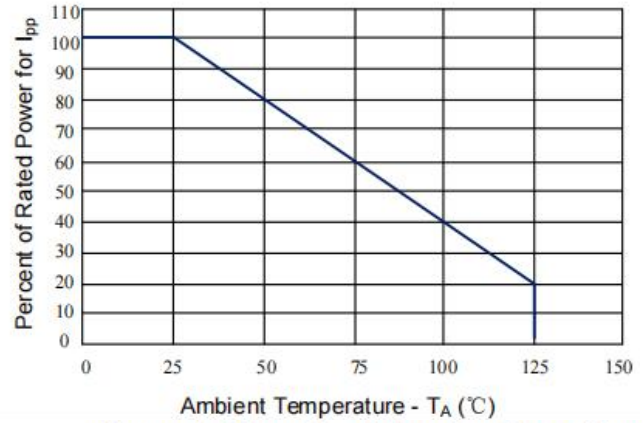


Figure 3: Clamping Voltage vs. Peak Pulse Current

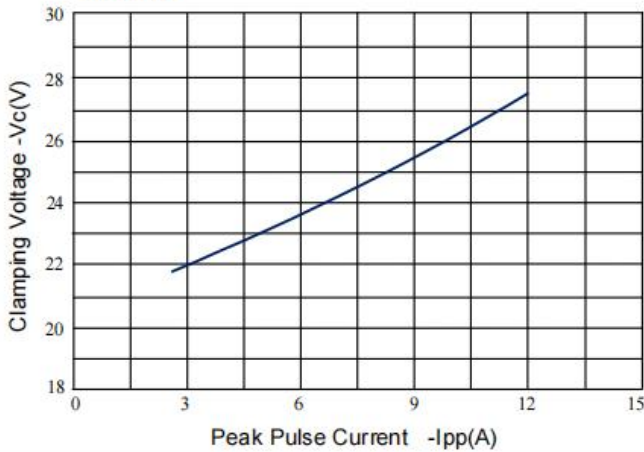


Figure 4: Normalized Junction Capacitance vs. Reverse Voltage

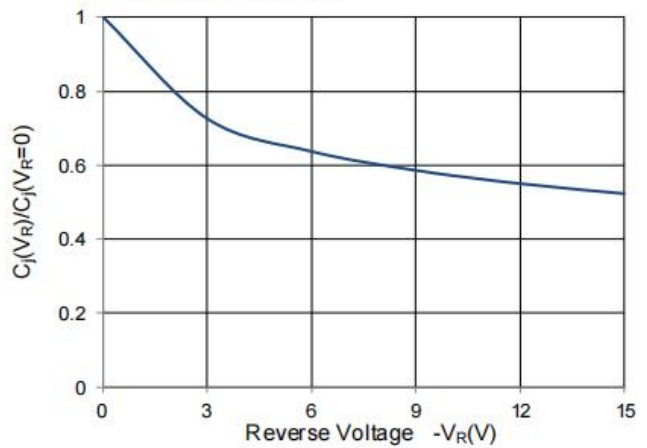


Figure 5: TLP Positive I-V Curve

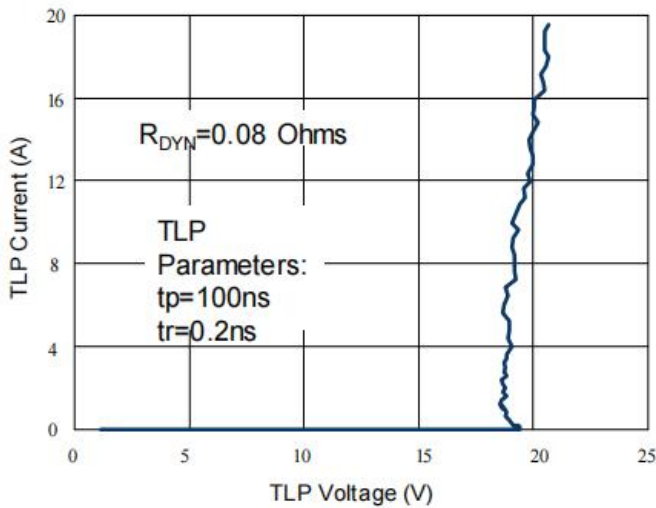
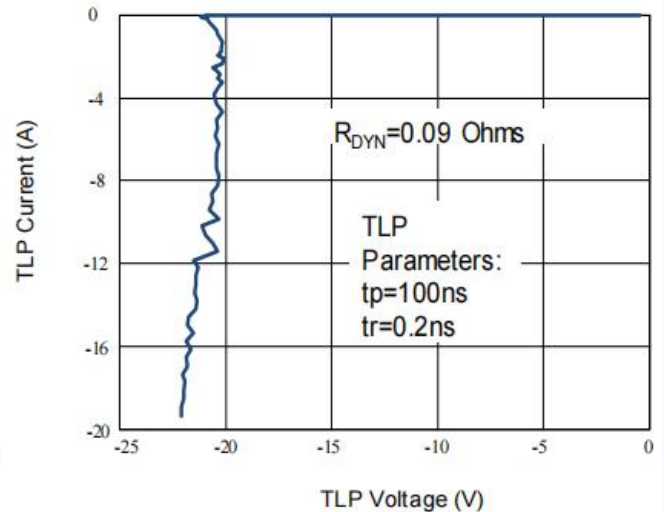


Figure 6: TLP Negative I-V Curve



Marking Codes

Part Number	CTSY24V0N1B2MB		
Marking Code	1	BQX	2
	BQ=Specific Device Cod X=Month Code		

Package Information

Qty: 10k/Reel

Outline Drawing –DFN1006-2L

PACKAGE OUTLINE

BOTTOM VIEW

DFN1006-2L

SYMBOL	MILLIMETERS		
	MIN	NOM	MAX
A	0.45	0.50	0.55
A1	0	0.02	0.05
b	0.45	0.50	0.55
C	0.12	0.15	0.18
D	0.95	1.00	1.05
e	0.65BSC		
E	0.55	0.60	0.65
L	0.20	0.25	0.30
L1	0.05REF		
h	0.07	0.12	0.17

Land Pattern