



PJUSBLC6-2W6

LOW CAPACITANCE TVS DIODE ARRAY

The PJUSBLC6-2W6 has a low typical capacitance of 1pF and operates with virtually no insertion loss to 1GHz. This makes the device ideal for protection of high-speed data lines such as USB2.0, Firewire, DVI, and Gigabit Ethernet interfaces.

The low capacitance array configuration allows the user to protect four high-speed data or transmission lines. The low inductance construction minimizes voltage overshoot during high current surge.

FEATURES

- IEC 61000-4-2 ±15kV air, +8kV Contact
- IEC 61000-4-5 (Lightning) 4A (8/20µs)
- IEC 61000-4-4 (EFT) (5/50ns) Level-4, 40A for I/O, 80A for Power
- Low leakage current
- Low clamping voltage
- Protect four I/O lines
- Molded JEDEC SOT-23 6L package
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SOT-23 6L, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx weight : 0.0005 ounces, 0.014 grams
- Marking: K6A

APPLICATIONS

- USB 2.0 Power and Data Line Protection
- Video Graphics Cards
- Monitors and Flat Panel Displays
- Digital Video Interface (DVI)
- 10/100/1000 Ethernet
- ATM Interfaces

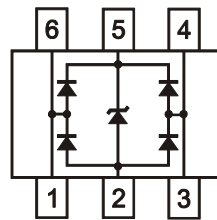
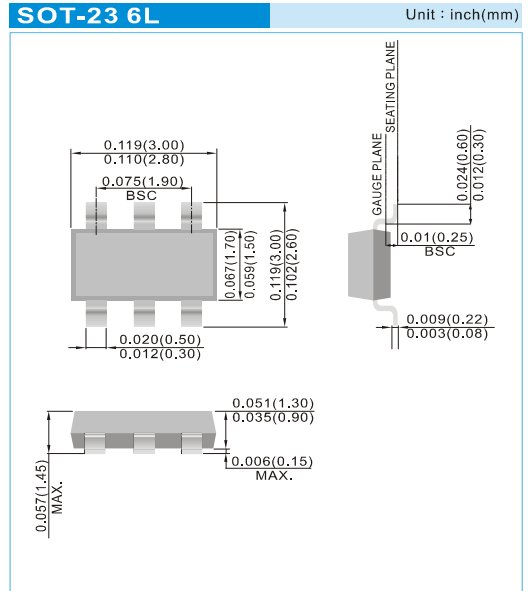


Fig.72(TOP VIEW)



ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

RATING	SYMBOL	VALUE	UNIT
Peak Pulse Current (8/20µs waveform)	I _{PPM}	5	A
ESD per IEC61000-4-2 (Air) ESD per IEC61000-4-2 (Contact)	V _{ESD}	± 15 ± 8	kV
Operating Junction Temperature and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C



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ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	V _{RWM}		-	-	5	V
Reverse Breakdown Voltage	V _{BR}	I _{BR} =1mA, PIN 5 to 2	6	-	8	V
Reverse Leakage Current	I _R	V _R =5V, PIN 5 to 2	-	-	150	nA
Clamping Voltage (8/20μs)	V _C	I _{PP} =1A, Any I/O pin to pin 2	-	-	8	V
Clamping Voltage (8/20μs)	V _C	I _{PP} =5A, Any I/O pin to pin 2	-	-	10	V
Off State Junction Capacitance	C _J	0 Vdc, f=1MHz between I/O lines and GND	-	-	1.2	pF
Off State Junction Capacitance	C _J	0 Vdc, f=1MHz between I/O lines	-	-	0.6	pF

RATING AND CHARACTERISTIC CURVES

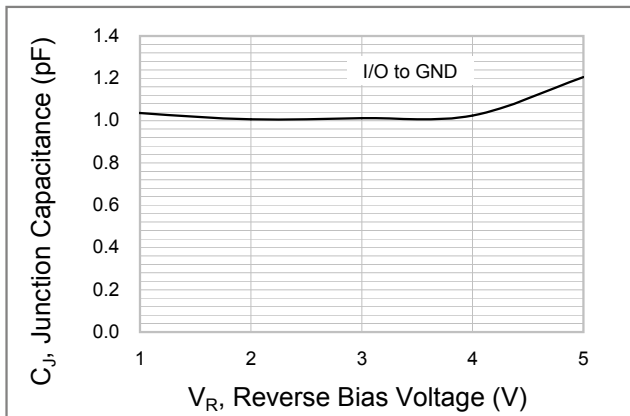


Fig.1 Typical Junction Capacitance

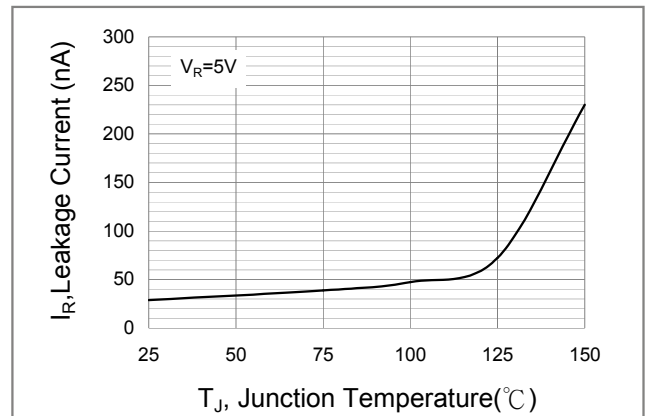


Fig.2 Typical Reverse Characteristics

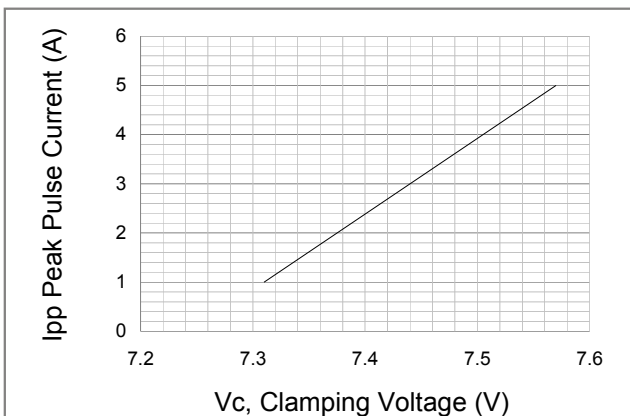


Fig.3 Typical Peak Clamping Voltage(8/20uS)

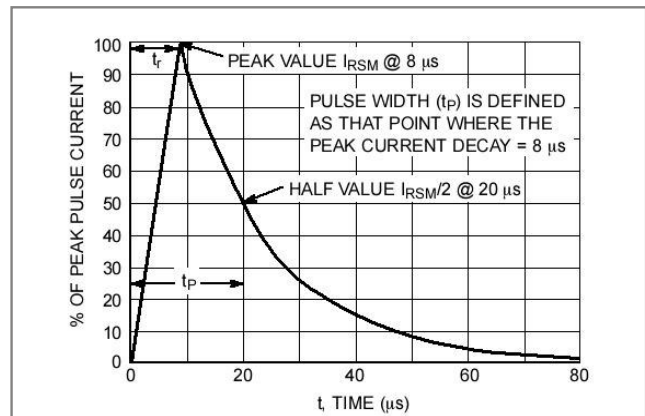


Fig.4 8/20μS Peak Pulse Current Waveform

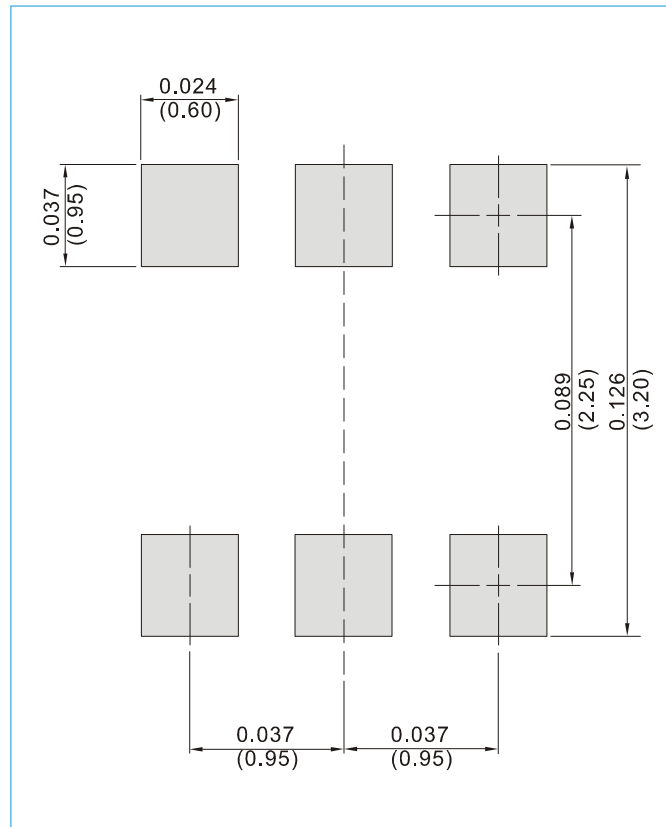


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MOUNTING PAD LAYOUT

SOT-23 6L

Unit : inch(mm)



ORDER INFORMATION

- Packing information
 - T/R - 10K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel