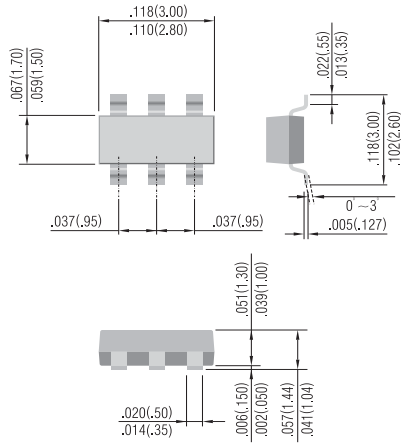
PJSRV05-4

LOW CAPACITANCE TVS DIODE ARRAY

The PJSRV05-4 has a low capacitance of 2.1pF and operates with virtually no insertion loes 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 trasmission lines.The low inductance construction minimizes voltage overshoot during high current surges. They may be used to meet the ESD immunity requirements of IEC61000-4-2,Level 4(15kV air,8kV contact discharge).

VOLTAGE	5 Volts	POWER	350Watts

SOT23-6L Unit: inch (mm)



FEATURES

- IEC61000-4-2 ESD 15kV Air, 8kV Contact compliance
- Low leakage current,maximum of 1μA at rated voltage
- Low clamping voltage
- Peak power dissipation of 350W under 8/20 μs waveform
- Protect four I/O lines
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: SOT23-6L, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Weight: approximately 0.013gram
- Marking : 054

APPLICATIONS

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

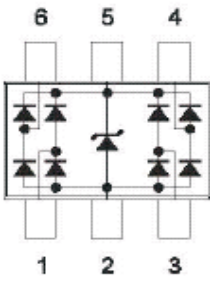


Fig.70

MAXIMUM RATINGS

Rating	Symbol	Value	Units
Peak Pulse Power (8/20 μs Waveform)	P_{PP}	350	W
Peak Pulse Current (8/20 μs Waveform)	I_{PPM}	12	A
ESD Voltage (HBM Contact)	V_{ESD}	>8	kV
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	°C

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Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	V_{WRM}		-	-	5	V
Reverse Breakdown Voltage	V_{BR}	I_{BR}=1mA, PIN 5 to 2	6	-	-	V
Reverse Leakage Current	I_R	V_R=5V, PIN 5 to 2	-	1.2	5	μA
Clamping Voltage (8/20μs)	V_C	I_{PP}=1A,ANY I/O pin to pin 2	-	-	12	V
Clamping Voltage (8/20μs)	V_C	I_{PP}=5A,ANY I/O pin to pin 2	-	-	17	V
Off State Junction Capacitance	C_J	0Vdc, f=1.0MHz between I/O lines and GND	-	1.1	1.2	pF
Off State Junction Capacitance	C_J	0Vdc, f=1.0MHz between I/O lines	-	0.55	0.60	pF

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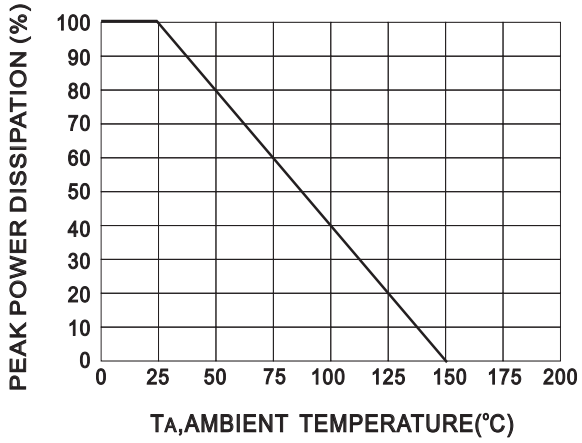

Fig 1.Power Derating Curve

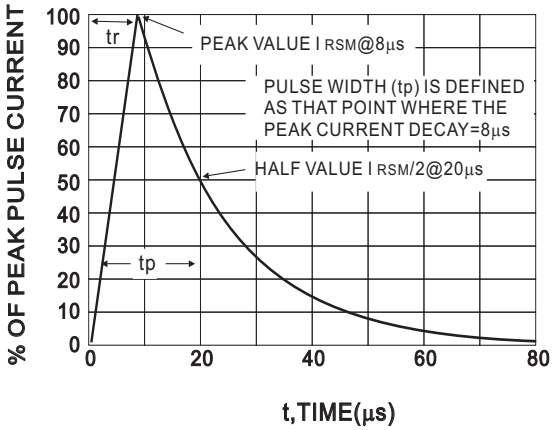

Fig 2. 8x20μs Pulse Waveform

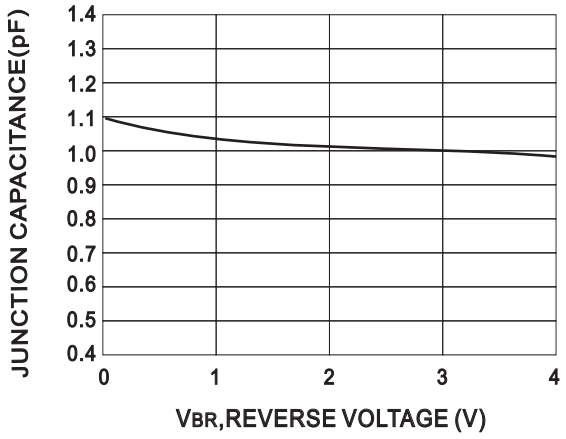

Fig 3. Junction Capacitance vs Reverse Voltage

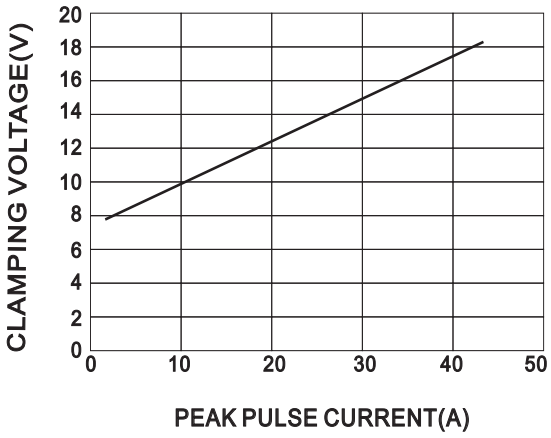

Fig 4. Clamping Voltage vs Peak Pulse Current (8x20 Waveform)

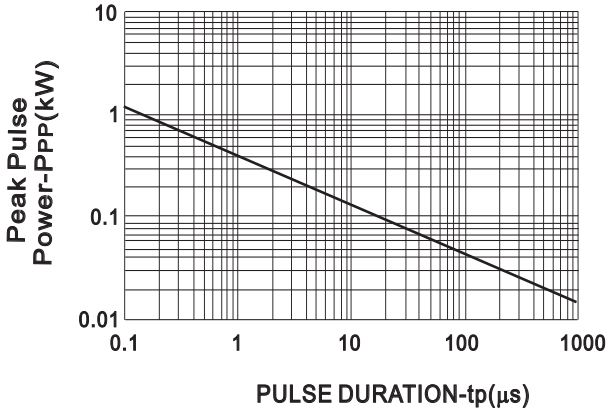

Fig 5. Non-Repetitive Peak Pulse vs. Pulse Time

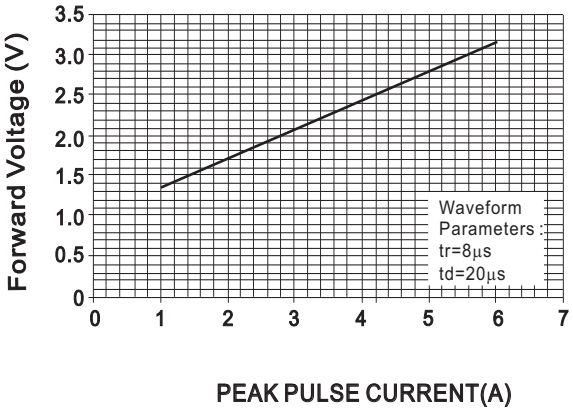

Fig 6. Forward Voltage vs. Forward Current

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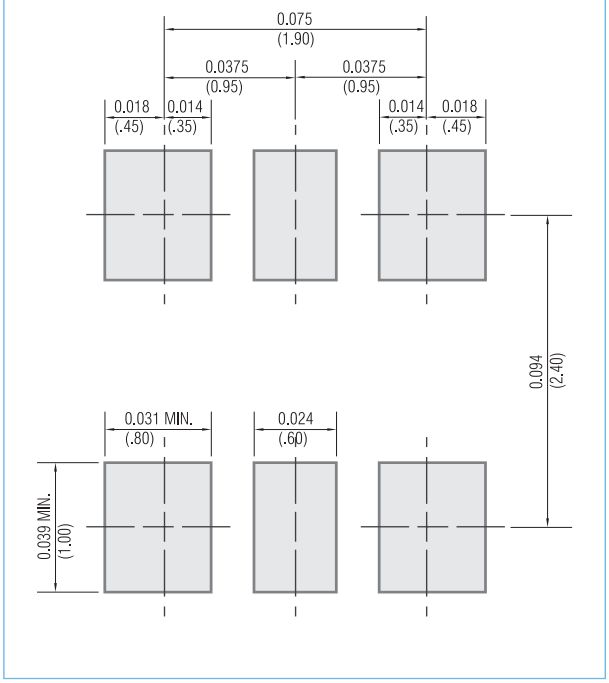
MOUNTING PAD LAYOUT

SOT23-6L Unit: inch (mm)



ORDER INFORMATION

- Packing information

  T/R - 10K per 13" plastic Reel

  T/R - 3K per 7” plastic Reel

LEGAL STATEMENT