



PJSRV05W-4W6-AU

LOW CAPACITANCE TVS DIODE ARRAY

The PJSRV05W-4W6 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

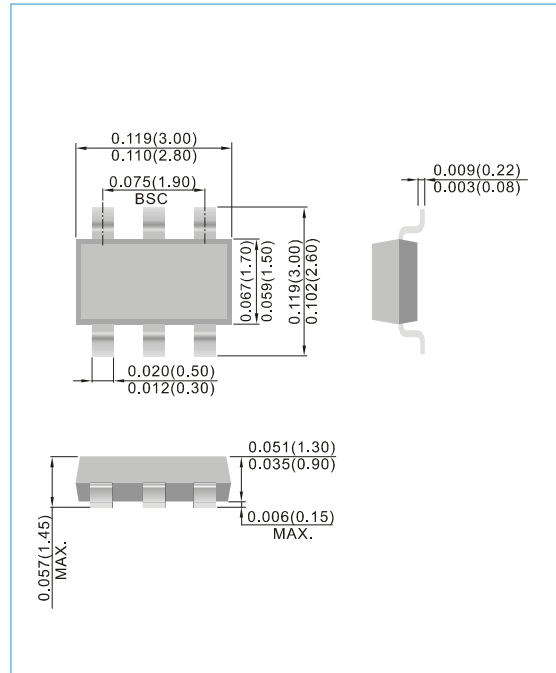
- IEC61000-4-2 ESD 15kV Air, 8kV Contact compliance
- Low leakage current
- Low clamping voltage
- Peak power dissipation of 50W under 8/20µs waveform
- Protect four I/O lines
- Molded JEDEC SOT-23 6L package
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)
- Acquire quality system certificate : TS16949
- AEC-Q101 qualified

MECHANICAL DATA

- Case: SOT-23 6L, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Weight: approximately 0.0002 ounces, 0.006 grams
- Marking : K6W

SOT-23 6L

Unit : inch(mm)



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

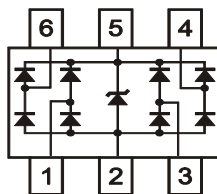


Fig.70(TOP VIEW)

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

RATING	SYMBOL	VALUE	UNIT
Peak Pulse Power (8/20µs waveform)	P _{PP}	50	W
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



PJSRV05W-4W6-AU

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	-	-	3	μA
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

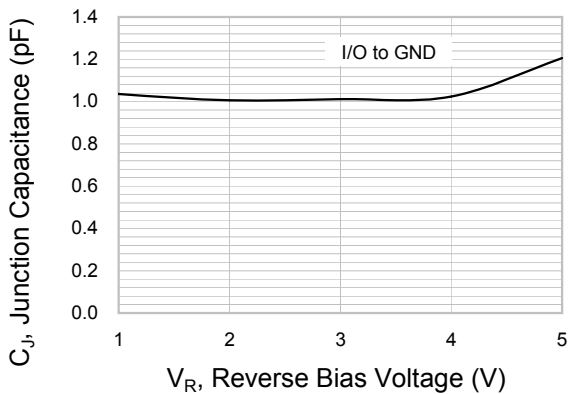


Fig.1 Typical Junction Capacitance

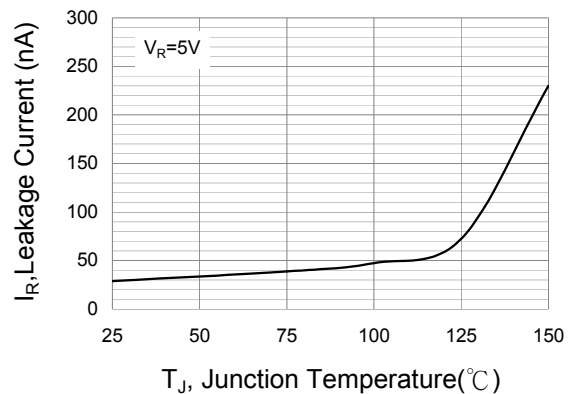


Fig.2 Typical Reverse Characteristics

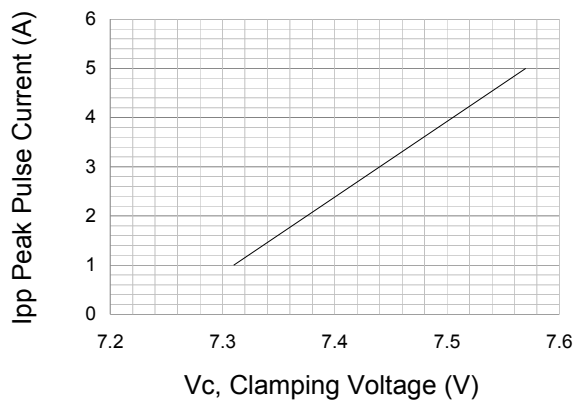


Fig.3 Typical Peak Clamping Voltage(8/20uS)

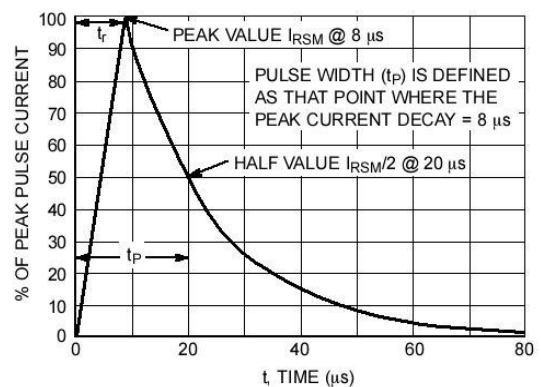
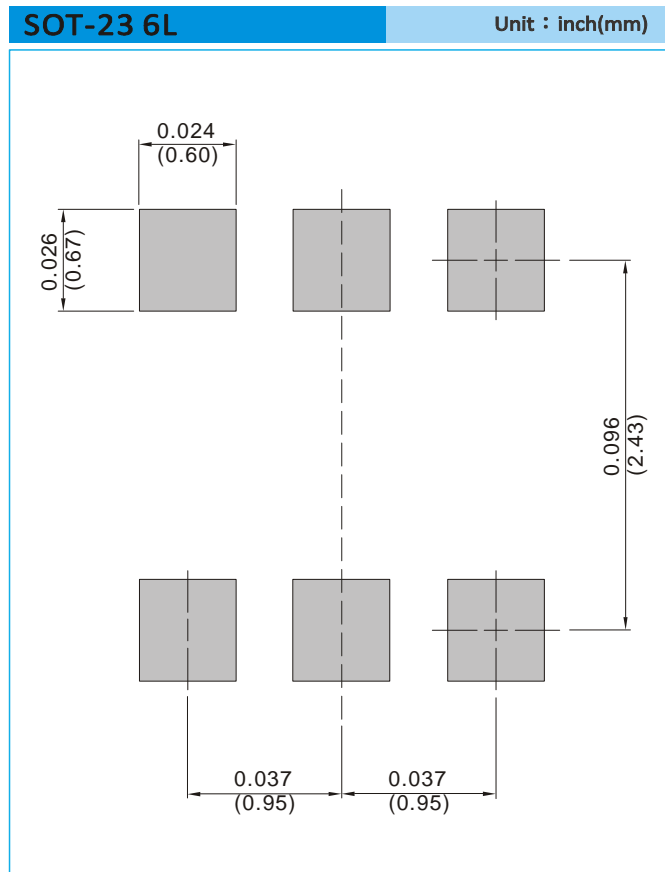


Fig.4 8/20μS Peak Pulse Current Waveform



PJSRV05W-4W6-AU

MOUNTING PAD LAYOUT



ORDER INFORMATION

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



PJSRV05W-4W6-AU

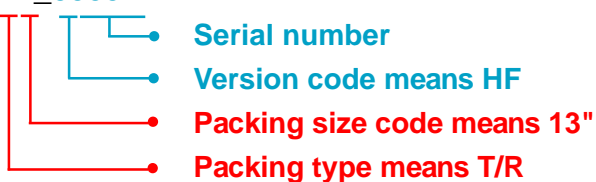
Part No_packing code_Version

PJSRV05W-4W6-AU_R1_000A1
 PJSRV05W-4W6-AU_R2_000A1
 PJSRV05W-4W6-AU_S1_000A1
 PJSRV05W-4W6-AU_S2_000A1

For example :

RB500V-40_R2_00001

Part No.



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



PJSRV05W-4W6-AU

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.