

PJUSB208 SERIES

LOW CAPACITANCE DIODE ARRAY

PJUSB208 series is surge rated diode array designed to protect high speed data interfaces. The PJUSB208 series has been specifically designed to protect sensitive components which are connect to data and transmission lines from over-voltages caused by ESD (electrostatic dischatge), EFT (electrical fast transients), and lightning.

FEATURES

- Maximum Capacitance of 3.0pF at 0Vdc 1MHz Line-to-Ground
- Low leakage current, maximum of 0.1μA at rated voltage
- IEC61000-4-2 ESD 15kV Air, 8kV Contact compliance
- Protect four I/O lines
- Flammability rating UL94V-0
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SOT23-6L, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram Below
- Approx. Weight : 0.014 grams
- Marking : PJUSB208 : 208
PJUSB208R : 316

APPLICATIONS

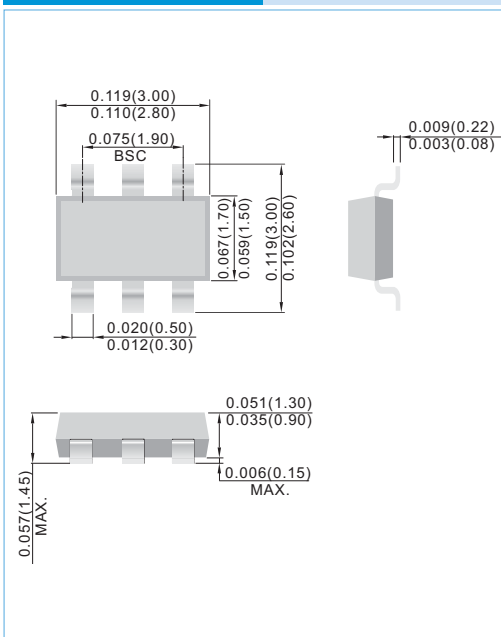
- USB 2.0 and Firewire Port Protection
- LAN / WLAN Access Point terminals
- Video Signal Line Protection

MAXIMUM RATINGS

Rating	Symbol	Value	Units
Rectifier Repetitive Peak Reverse Voltage	V_{RRM}	70	V
ESD per IEC61000-4-2(Air) ESD per IEC61000-4-2(Contact)	V_{ESD}	>15 >8	kV
Surge Non Repetitive Forward Current-Rectangular waveform tp=2.5μs tp=1ms tp=100ms	I_{FSM}	6 2 1	A
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to + 150	°C

SOT-23 6L

Unit : inch(mm)



PJUSB208 SERIES

ELECTRICAL CHARACTERISTICS (T_J=25°C)

PJUSB208 FIG.71

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Peak Reverse Stand-Off Voltage	V _{RRM}		-	-	70	V
Reverse Breakdown Voltage	V _{BR}	I _{BR} = 50μA	85	-	-	V
Reverse Leakage Current	I _R	V _{RWM} = 70V	-	0.1	1	μA
Off State Junction Capacitance	C _J	0Vdc, f=1MHz between I/O lines and GND	-	-	1	pF
Off State Junction Capacitance	C _J	0Vdc, f=1MHz between I/O lines	-	-	0.9	pF

PJUSB208R FIG.100

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Peak Reverse Stand-Off Voltage	V _{RRM}		-	-	70	V
Reverse Breakdown Voltage	V _{BR}	I _{BR} = 50μA	85	-	-	V
Reverse Leakage Current	I _R	V _{RWM} = 70V	-	0.1	1	μA
Off State Junction Capacitance	C _J	0Vdc, f=1MHz between I/O lines and GND	-	-	1	pF
Off State Junction Capacitance	C _J	0Vdc, f=1MHz between I/O lines	-	-	0.9	pF

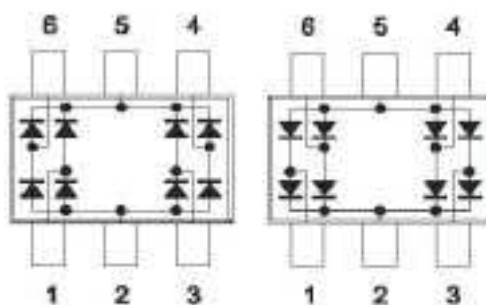
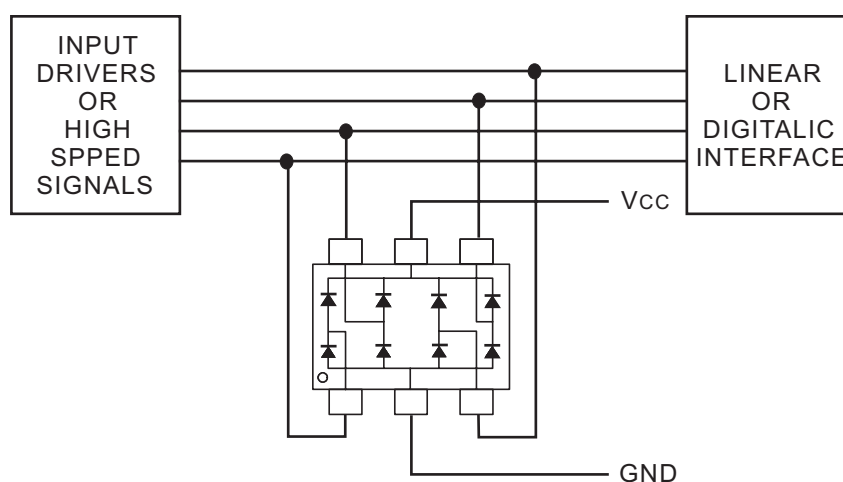


Fig.71

Fig.100



PJUSB208 SERIES

TYPICAL CHARACTERISTICS CURVES

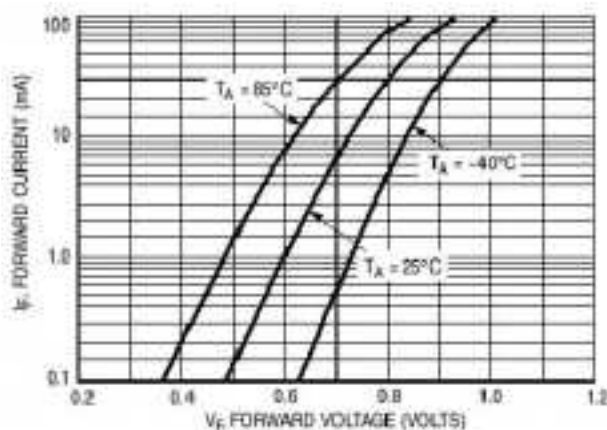


Figure 1. Forward Voltage

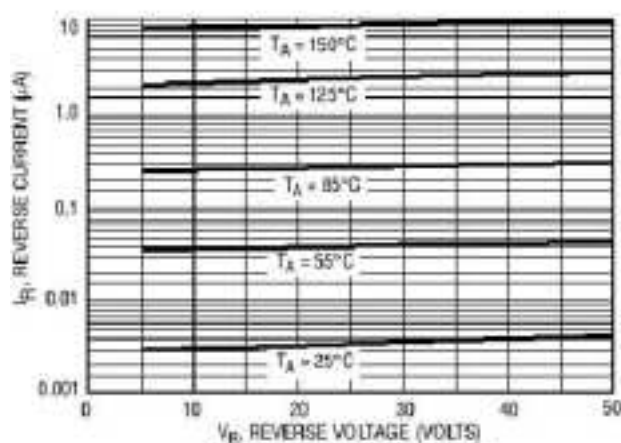


Figure 2. Leakage Current

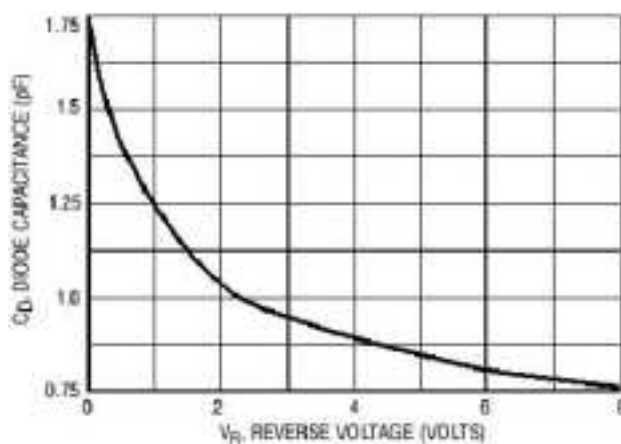
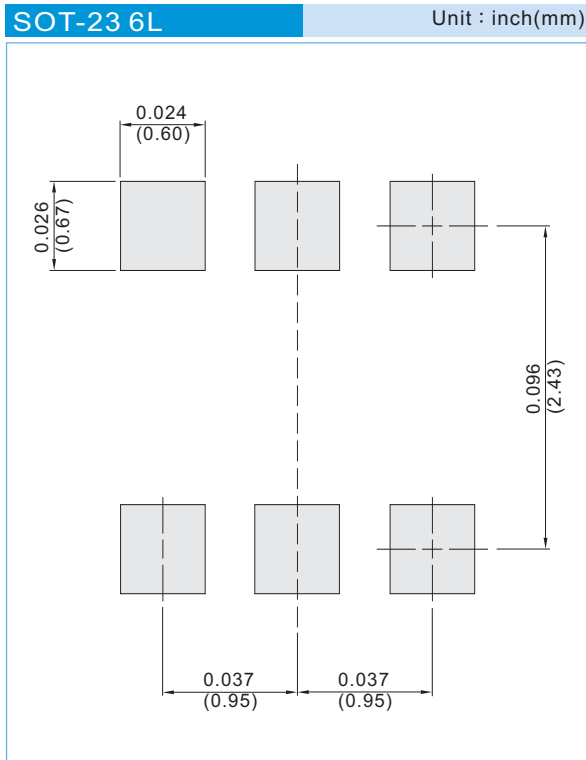


Figure 3. Capacitance

PJUSB208 SERIES

MOUNTING PAD LAYOUT



ORDER INFORMATION

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

PJUSB208 SERIES

Part No_packing code_Version

PJUSB208_R1_00001

PJUSB208_R2_00001

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

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			



PJUSB208 SERIES

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.