

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
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

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

APPLICATIONS

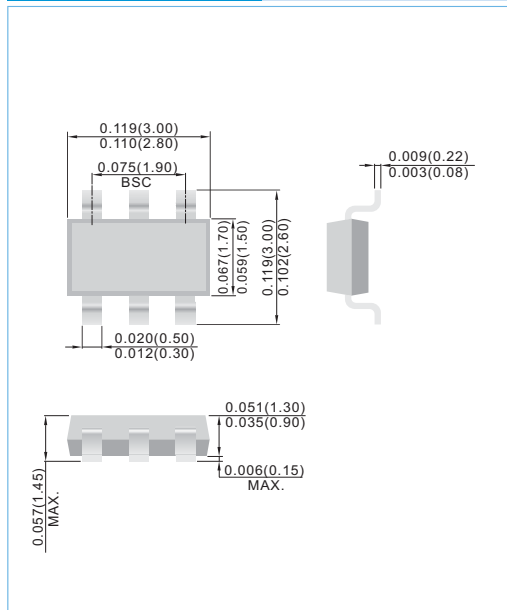
- USB 2.0 and Firewire Port Protection
- LAN / WLAN Access Point terminals
- Video Signal Line Protection

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 $t_p=2.5\mu s$ $t_p=1ms$ $t_p=100ms$	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)



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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

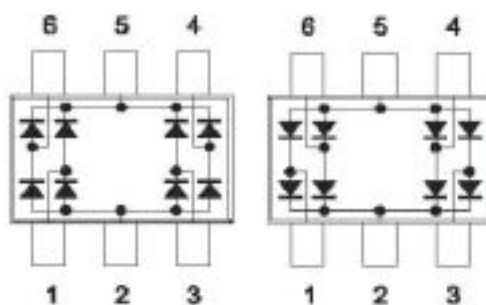
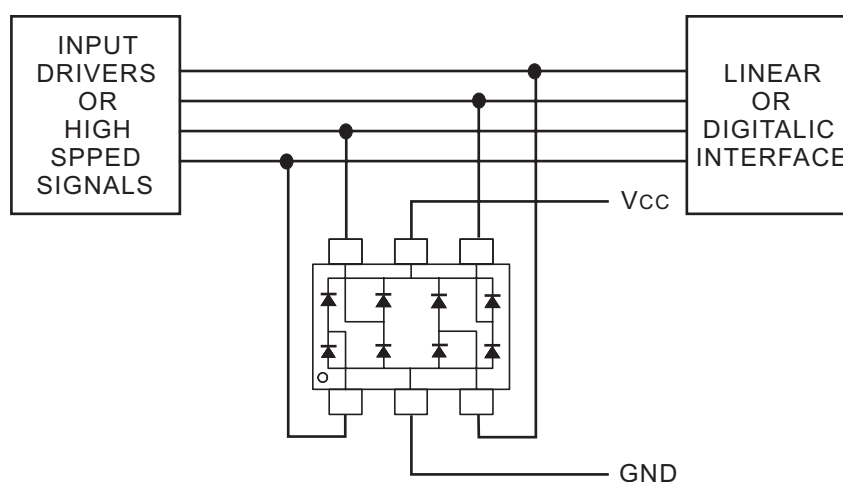


Fig.71

Fig.100



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TYPICAL CHARACTERISTICS CURVES

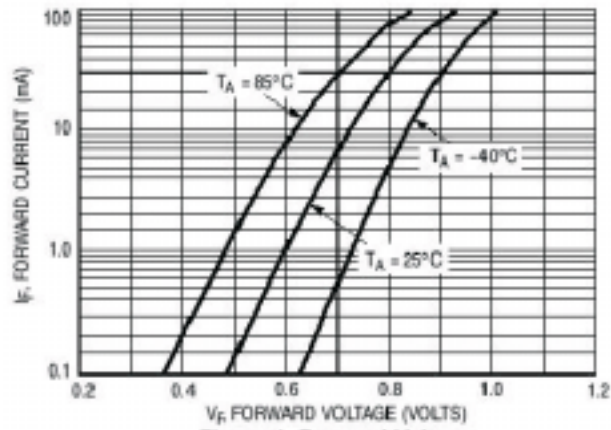


Figure 1. Forward Voltage

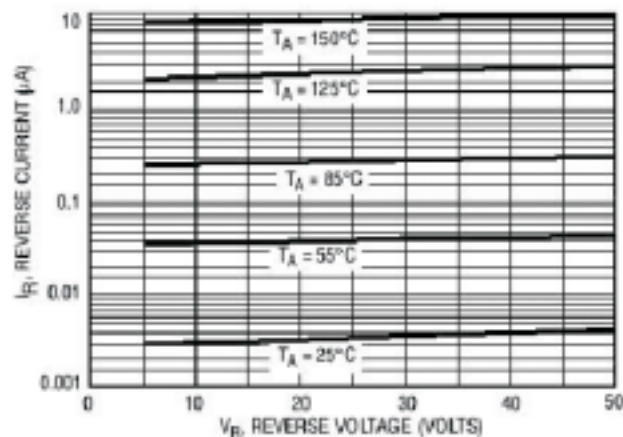


Figure 2. Leakage Current

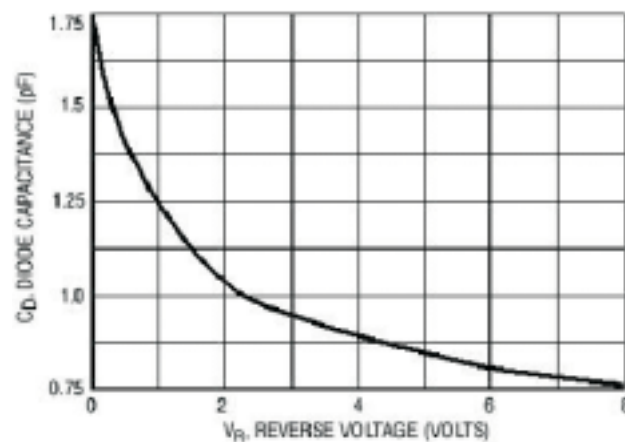
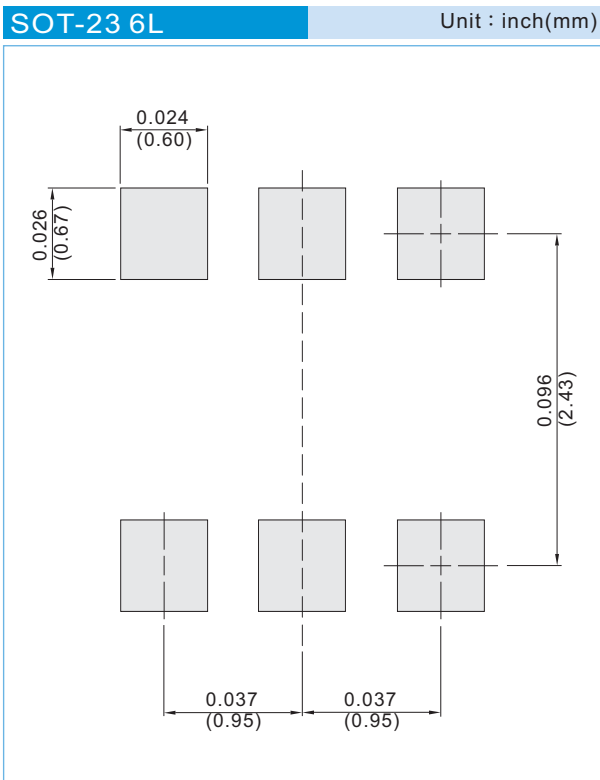


Figure 3. Capacitance

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MOUNTING PAD LAYOUT



ORDER INFORMATION

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

LEGAL STATEMENT

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