



# PJUSB208DW

## LOW CAPACITANCE DIODE ARRAY

The PJUSB208DW has a low capacitance of 0.9pF and operates with virtually no insertion loss to 1GHz. This makes the device ideal for usage of high-speed data lines such as USB2.0, Firewire, DVI, and gigabit Ethernet interfaces.

The low capacitance array configuration enable users to apply to four high-speed data or transmission lines.

### FEATURES

- Maximum Capacitance of 1.0pF at 0Vdc 1MHz Line-to-Ground
- Low leakage current, maximum of 0.1μA at rated voltage
- Protect four I/O lines
- Flammability rating UL94V-0
- Lead free in comply with EU RoHS 2011/65/EU directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: SOT-363, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram Below
- Approx.Weight : 0.0002 ounces,0.006 grams
- Marking : 8DW

### APPLICATIONS

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

### SOT-363

Unit : inch(mm)

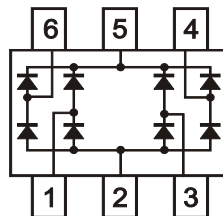
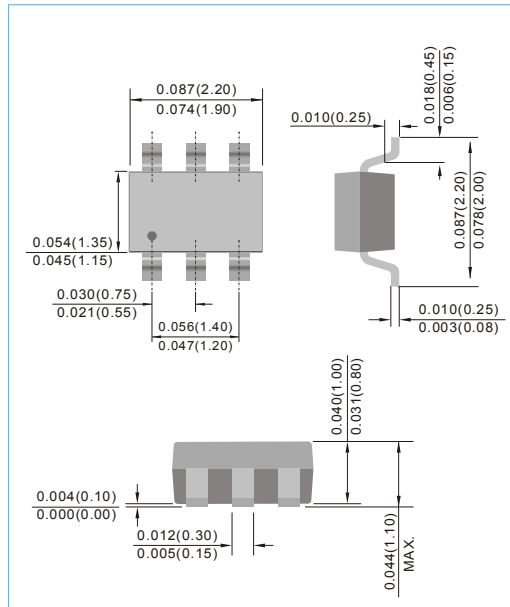


Fig.71 (TOP VIEW)

### MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

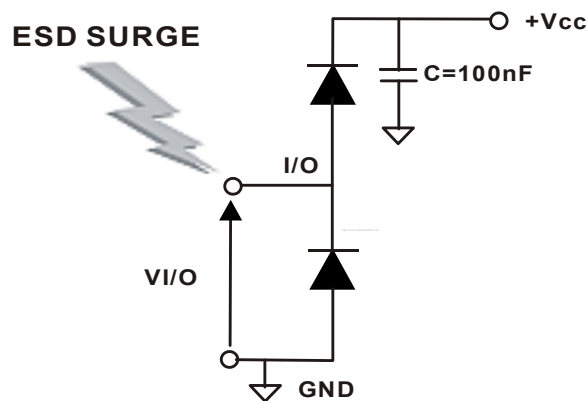
RATING	SYMBOL	VALUE	UNITS
Rectifier Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	70	V
ESD per IEC61000-4-2 (Air) (Note.1) ESD per IEC61000-4-2 (Contact) (Note.1)	V <sub>ESD</sub>	± 15 ± 8	kV
Surge Non Repetitive Forward Current-Rectangular waveform tp=1ms tp=100ms	I <sub>FSM</sub>	2 0.5	A
Operating Junction Temperature and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150	°C



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## ELECTRICAL CHARACTERISTICS (T<sub>J</sub>=25°C)

PARAMETER	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Reverse Stand-Off Voltage	V <sub>R</sub> RM		-	-	70	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>BR</sub> = 50μA	85	-	-	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> = 70V	-	0.04	0.1	μA
Off State Junction Capacitance	C <sub>J</sub>	0Vdc, f=1MHz between I/O lines and GND	-	-	1	pF
Off State Junction Capacitance	C <sub>J</sub>	0Vdc, f=1MHz between I/O lines	-	-	0.9	pF

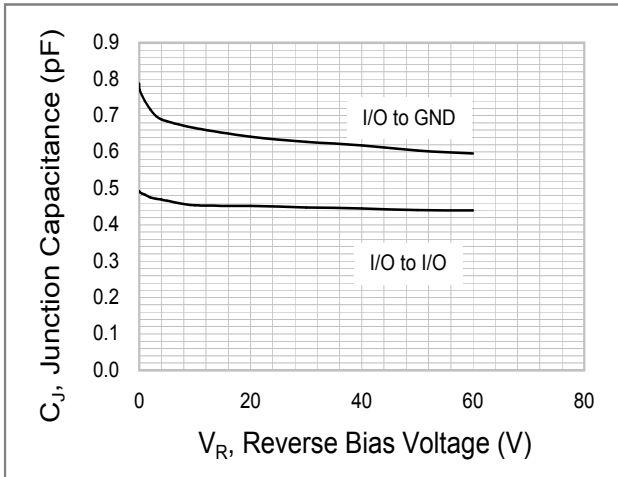


**Note.1 ESD behavior: Measurements conditions (with coupling capacitance)**

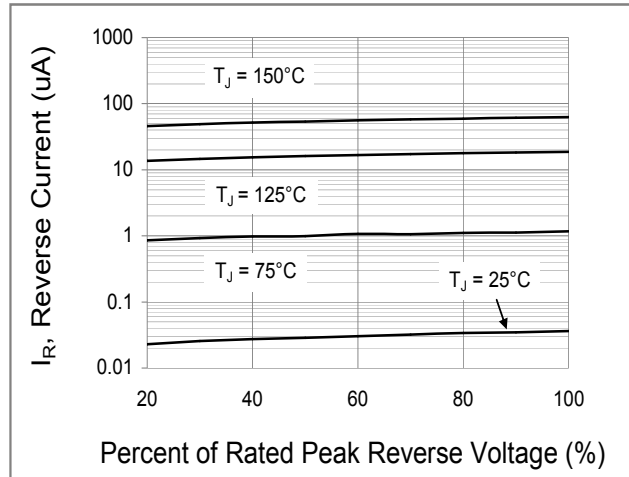


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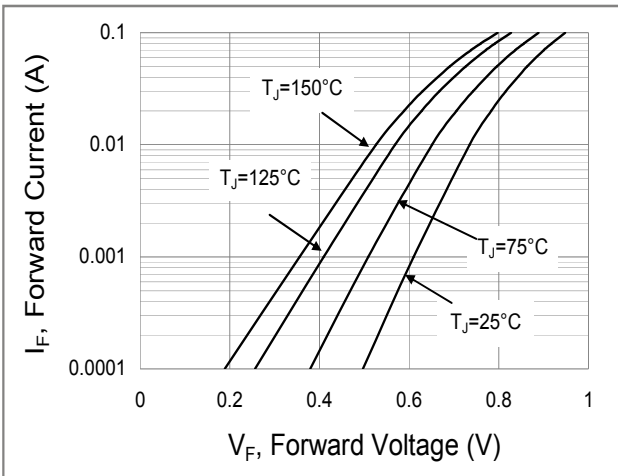
## RATING AND CHARACTERISTIC CURVES



**Fig.1 Typical Junction Capacitance**



**Fig.2 Typical Reverse Characteristics**

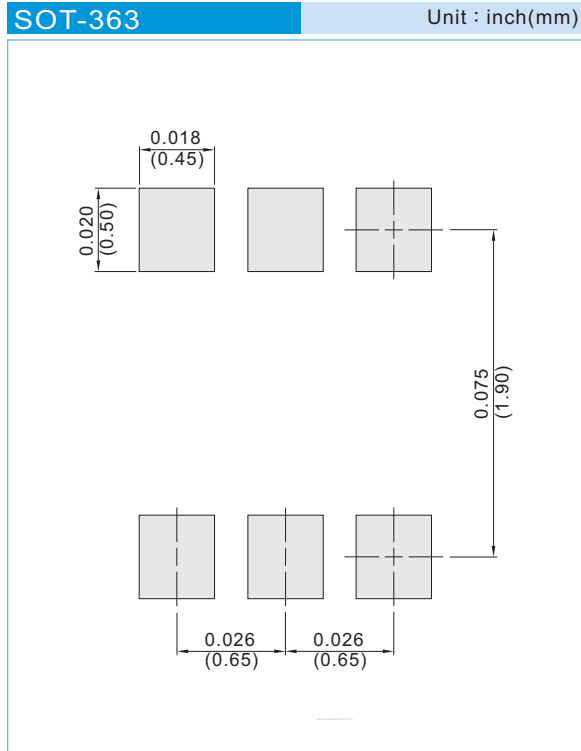


**Fig.3 Typical Forward Characteristics**



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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



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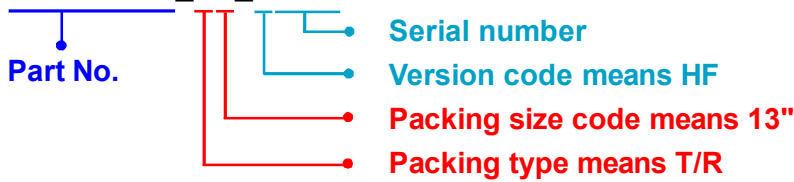
## Part No\_packing code\_Version

PJUSB208DW\_R1\_00001

PJUSB208DW\_R2\_00001

For example :

**RB500V-40\_R2\_00001**



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



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