

# PJDL05C-03

**VOLTAGE** 5.0 Volts **POWER** 250 Watts

**SOT-23** Unit : inch(mm)

## ULTRA LOW CAPACITANCE DUAL TRANSIENT VOLTAGE SUPPRESSOR FOR HIGH SPEED DATA LINES

This transient overvoltage suppressor is intended to protect sensitive equipment against electrostatic discharge events as well to offer a minimum insertion loss in data transmission lines in communications ports used in portable consumer, computing and networking applications. This dual transient voltage suppressor comes in a single SOT-23, offering board space reduction, where the application requires it.

This device comes with two pairs of high speed switching diodes connected in series, where both pairs are electrically isolated, offering a very low capacitance, minimizing the insertion losses in data transmission lines.

### FEATURES

- Maximum capacitance @ 0 Vdc Bias of 1.0 pF between terminals 1-3 or terminals 2-3
- IEC61000-4-2 esd 15kV Air, 8kV contact compliance
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: SOT-23, plastic
- Terminals: solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0003 ounces, 0.0084 grams
- Marking : DBA

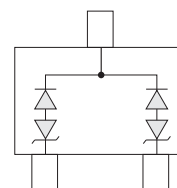
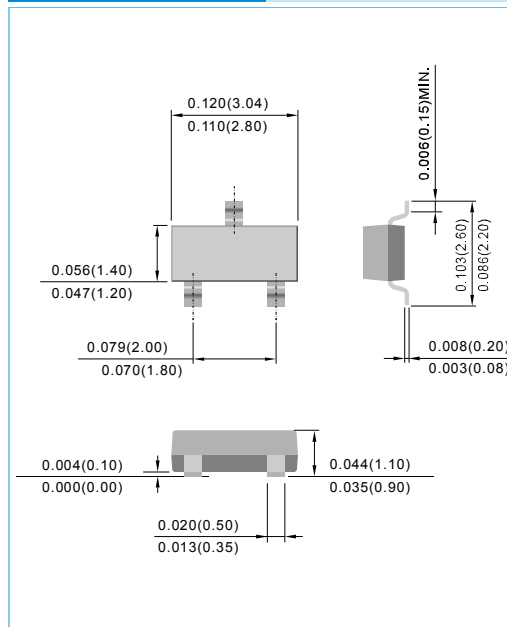


Fig.21

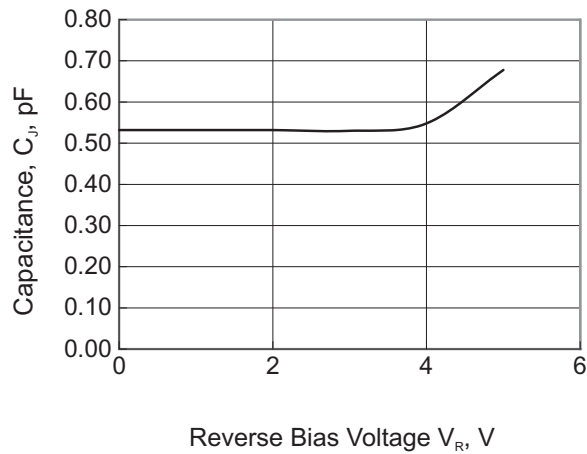
### MAXIMUM RATINGS

Parameter	Symbol	Value	Units
Operating Junction	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

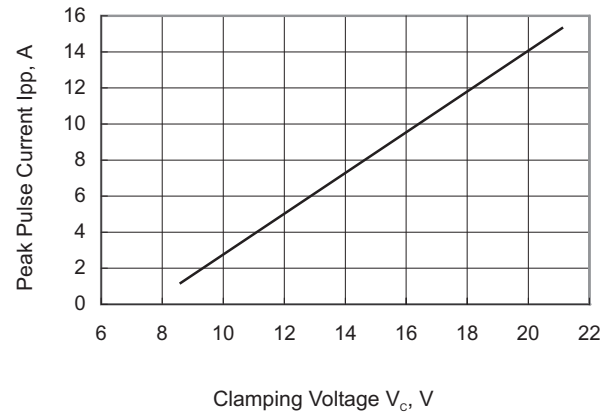
### ELECTRICAL CHARACTERISTICS

PJDL05C-03						
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V <sub>RWM</sub>	-	-	-	5	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>T</sub> =1mA	6	-	-	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> = 5V, T = 25°C	-	-	20	μA
Junction Capacitance	C <sub>J</sub>	Between pin1.2 to 3 V <sub>R</sub> =0V,f=1MHz	-	-	1.0	pF
Peak Pulse Current	I <sub>PP</sub>	t <sub>p</sub> =8/20 μsec	-	-	12	A
Max Clamping Voltage	V <sub>C</sub>	t <sub>p</sub> =8/20 μsec	-	-	22	V

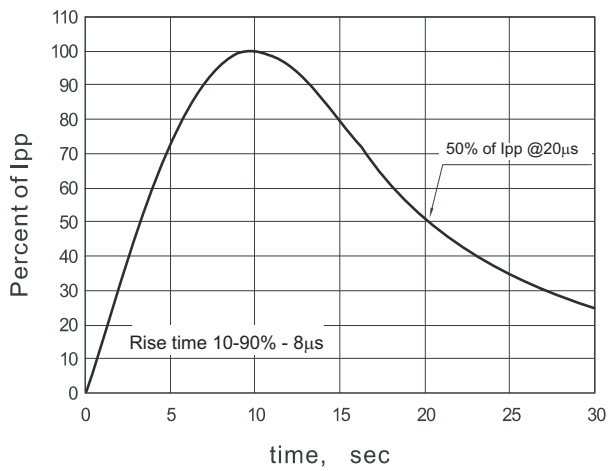
## PJDL C05C-03



**Fig.1 TYPICAL CAPACITANCE**



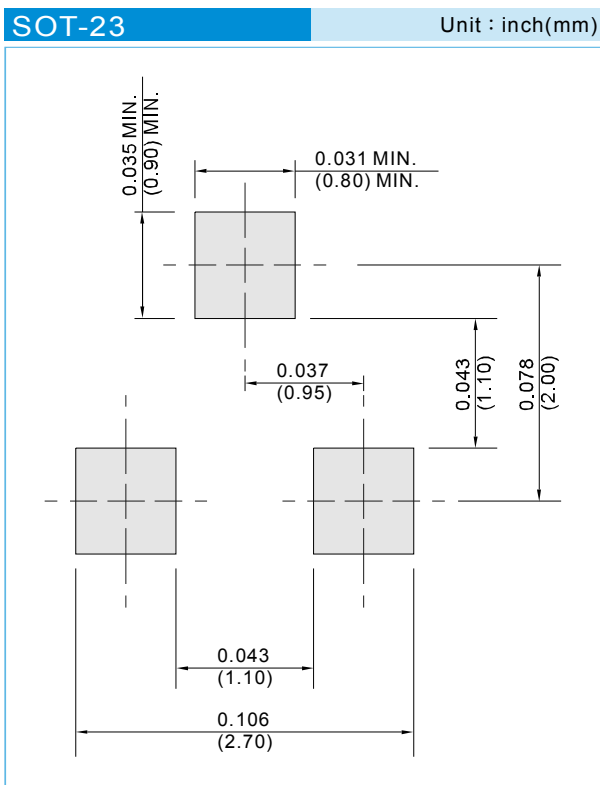
**Fig.2 PULSE WAVE FORM**



**Fig.3 PULSE WAVE FORM**

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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information
  - T/R - 12K per 13" plastic Reel
  - T/R - 3K per 7" plastic Reel

## PJDLC05C-03

### Part No\_packing code\_Version

PJDLC05C-03\_R1\_00001

PJDLC05C-03\_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 <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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