



# PJDLC05C-05

**VOLTAGE**

**5 Volt**

**POWER**

**400 Watt**

**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.

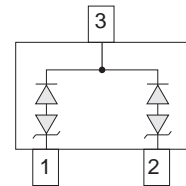
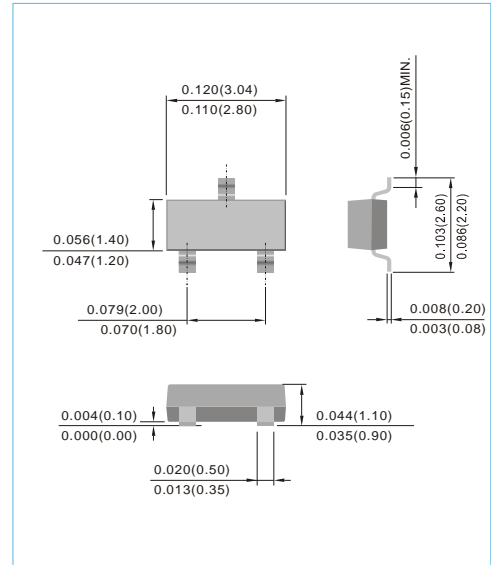
This device comes with two pairs of high speed switching diodes connected in series, where both pairs are electrically isolated, offering a very low capacitance, minimizing the insertion losses in data transmission lines.

### FEATURES

- Maximum capacitance @ 0 Vdc Bias of 1 pF between terminals 1-3 or terminals 2-3
- IEC61000-4-2 esd 15kV Air, 8kV contact compliance
- Lead free in compliance with EU RoHS 2011/65/EU directive
- 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 ounce, 0.0084 gram
- Marking: DEA



**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

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	-	0.8	1.2	µA
Junction Capacitance	C <sub>J</sub>	Between pin1,2 to 3 V <sub>R</sub> =0V,f=1MHz	-	-	1	pF
Peak Pulse Current	I <sub>PP</sub>	t <sub>p</sub> =8/20 µsec	-	-	17	A
Clamping Voltage	V <sub>C</sub>	t <sub>p</sub> =8/20 µsec @1A	-	-	9.5	V
Clamping Voltage	V <sub>C</sub>	t <sub>p</sub> =8/20 µsec @5A	-	-	12	V



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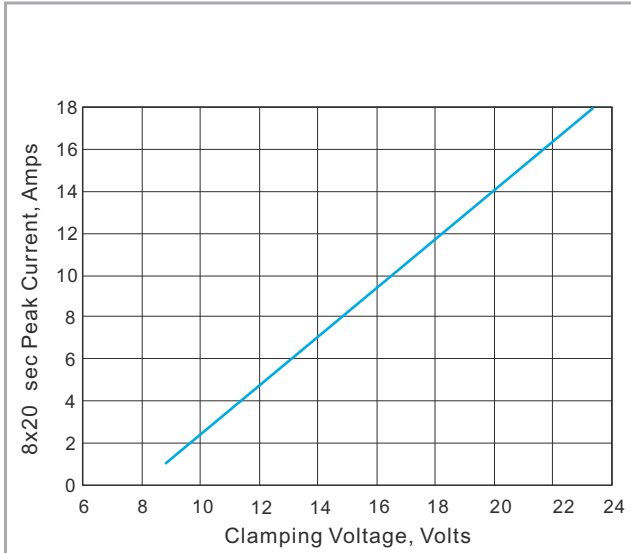


Fig 1- Clamping Voltage vs Ipp 8x20 sec

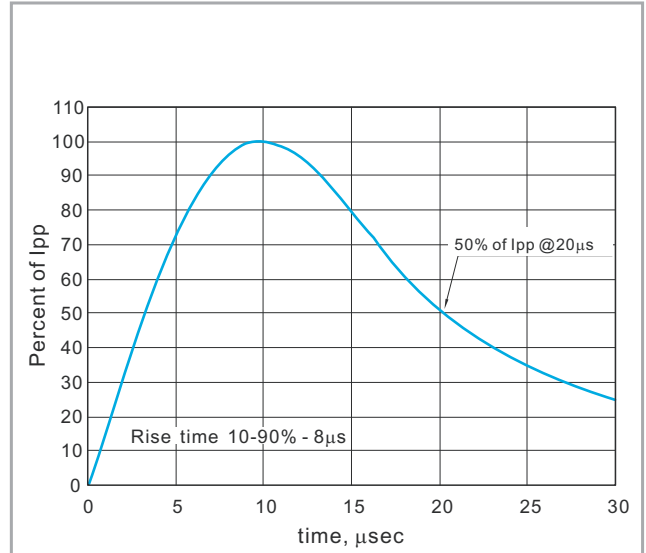


Fig 2- Pulse Waveform

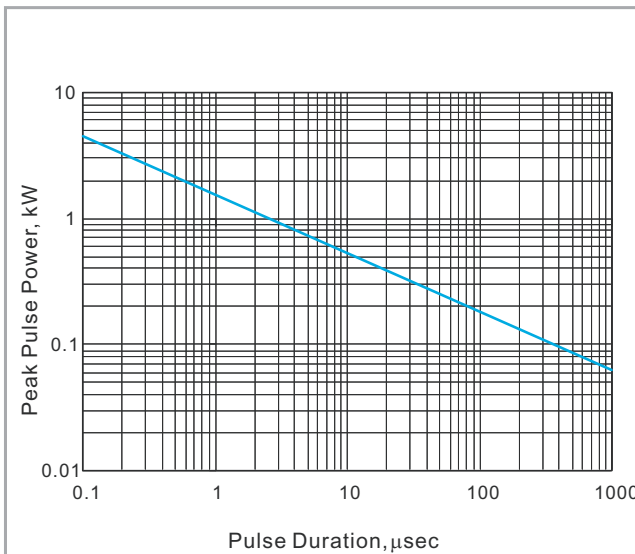


Fig 3- Non-Repetitive Peak Pulse Power vs Pulse Time

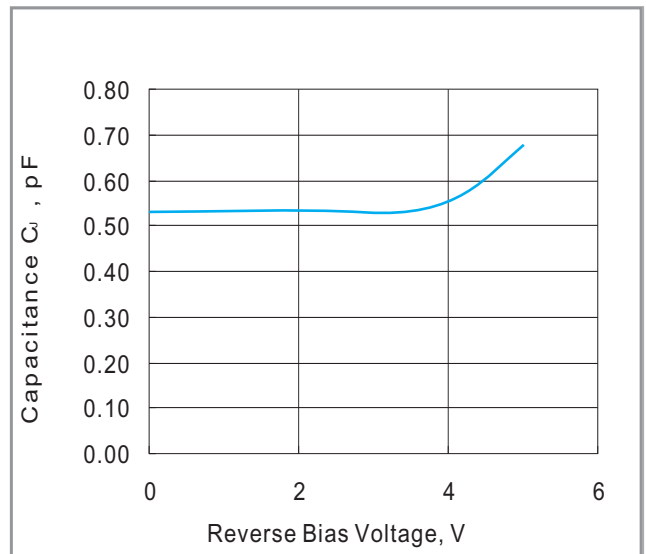


FIG.4- TYPICAL JUNCTION CAPACITANCE UNDER BIAS

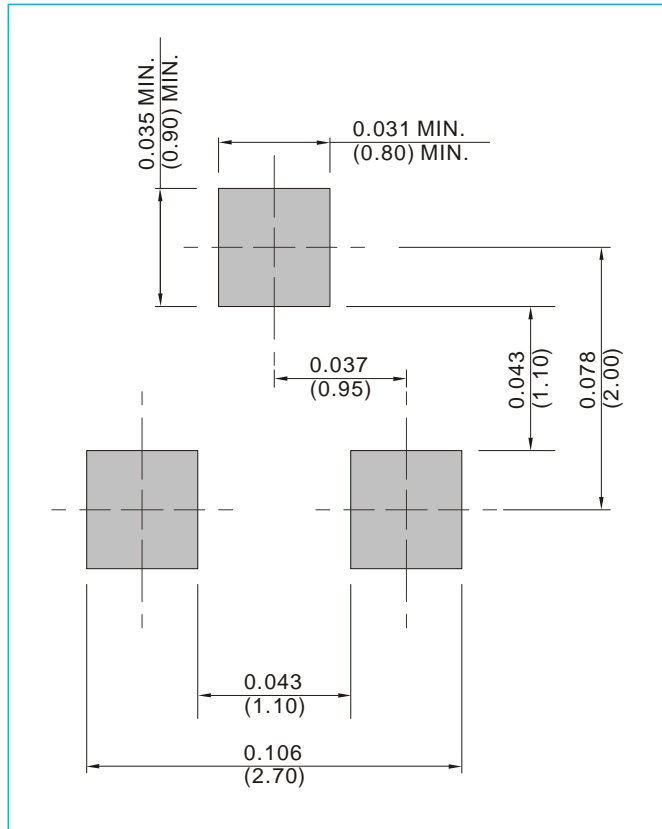


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## MOUNTING PAD LAYOUT

**SOT-23**

Unit : inch(mm)



## ORDER INFORMATION

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



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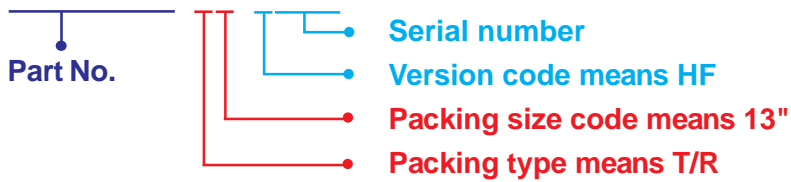
## Part No\_packing code\_Version

PJDLC05C-05\_R1\_00001

PJDLC05C-05\_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)	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			



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