



# PJDLC05C-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
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

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

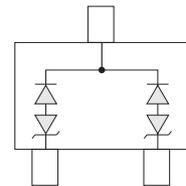
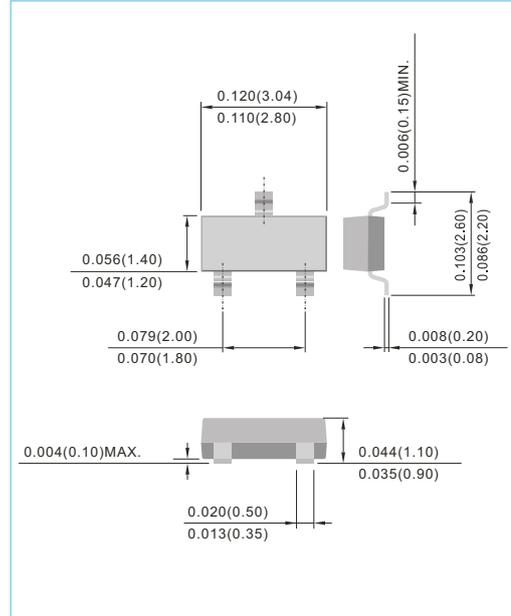


Fig.21

### MAXIMUM RATINGS

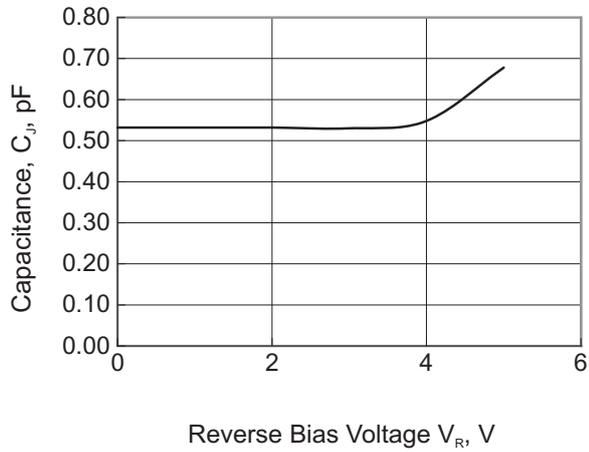
Parameter	Symbol	Value	Units
Operating Junction	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

### ELECTRICAL CHARACTERISTICS

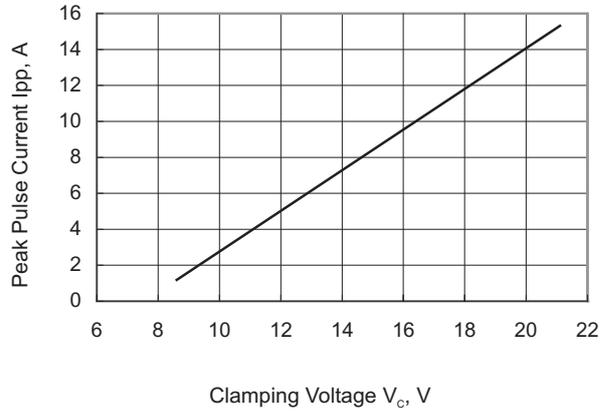
PJDLC05C-03						
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V <sub>RWM</sub>	-	-	-	5	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>T</sub> =1mA	6	-	-	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> = 5V, T = 25°C	-	-	20	μA
Junction Capacitance	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



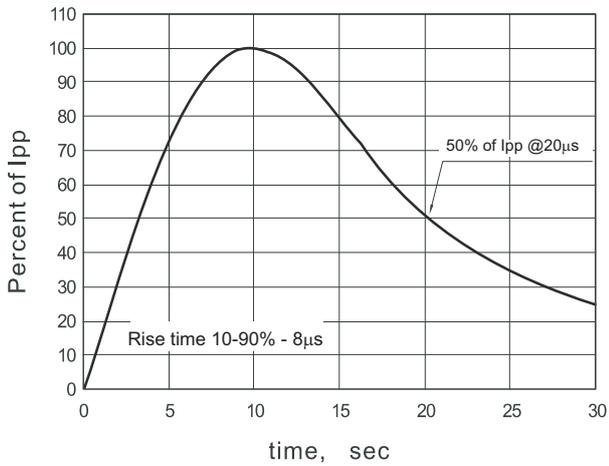
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**Fig.1 TYPICAL CAPACITANCE**



**Fig.2 PULSE WAVE FORM**

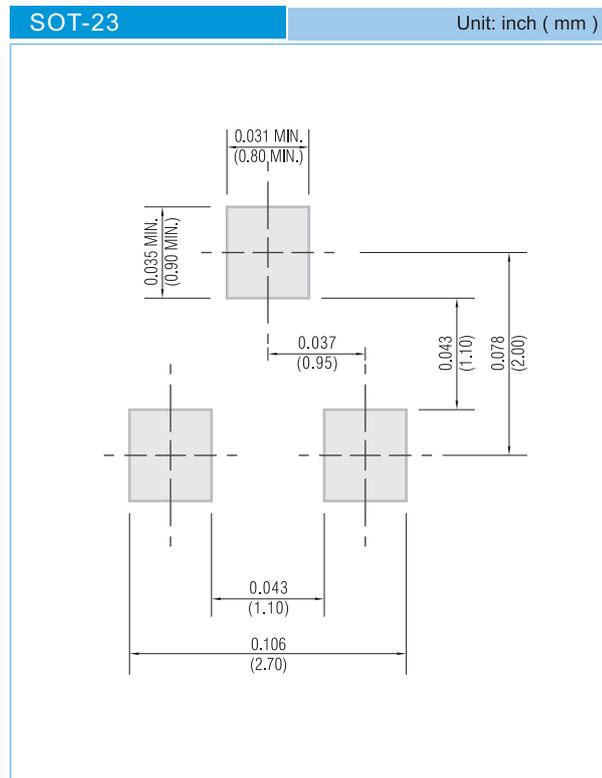


**Fig.3 PULSE WAVE FORM**



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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

### LEGAL STATEMENT

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