



PJDLC05C-02TB

VOLTAGE

5.0 Volts

POWER

200 Watts

SOT-523

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-523, 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-523, plastic
- Terminals: solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.00007ounce, 0.002 gram
- Marking : M7

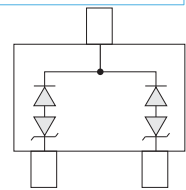
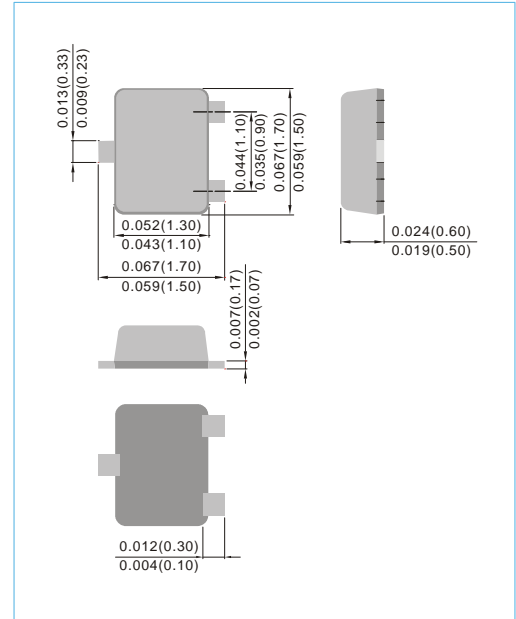


Fig.21

MAXIMUM RATINGS

| PARAMETER | SYMBOL | VALUE | UNITS |
|---------------------------|------------------|-------------|-------|
| Operating Junction | T _J | -55 to +150 | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | °C |

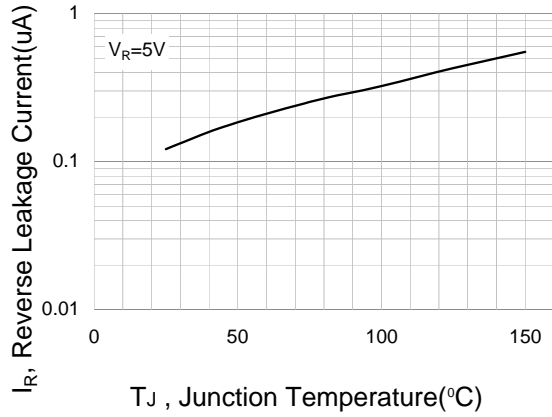
ELECTRICAL CHARACTERISTICS

| PARAMETER | SYMBOL | CONDITIONS | Min. | Typ. | Max. | UNITS |
|---------------------------|------------------|--|------|------|------|-------|
| Reverse Stand-Off Voltage | V _{RWM} | - | - | - | 5 | V |
| Reverse Breakdown Voltage | V _{BR} | I _T =1mA | 6 | - | - | V |
| Reverse Leakage Current | I _R | V _{RWM} = 5V, T _J = 25°C | - | - | 20 | μA |
| Junction Capacitance | C _J | Between pin1,2 to 3 V _R =0V,f=1MHz | - | - | 1.0 | pF |
| Peak Pulse Current | I _{PP} | t _p =8/20 μsec | - | - | 10 | A |
| Max. Clamping Voltage | V _C | t _p =8/20 μsec | - | - | 20.5 | V |

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**Fig.1 TYPICAL LEAKAGE CURRENT
JUNCTION TEMPERATURE**

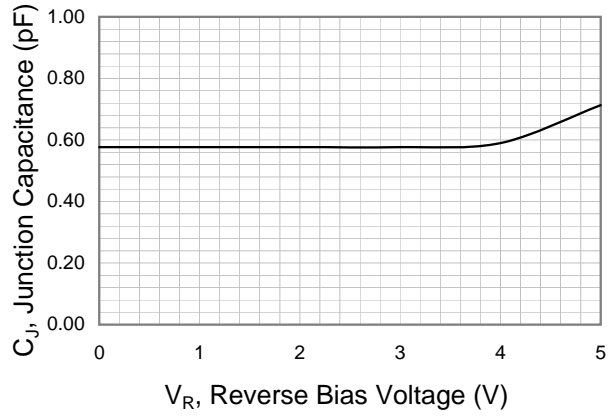


Fig.2 Typical Junction Capacitance

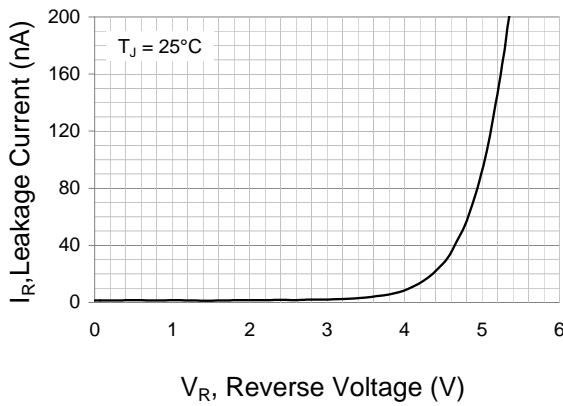


Fig.3 Typical Reverse Characteristics

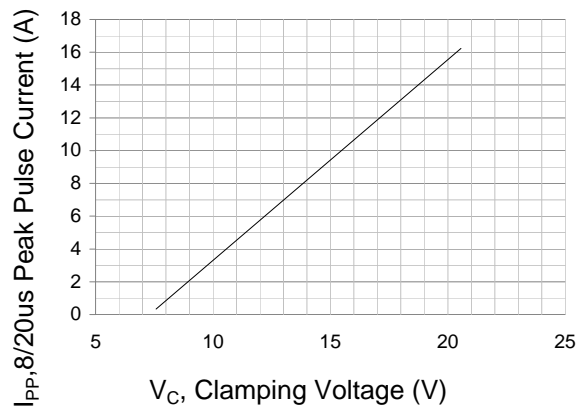
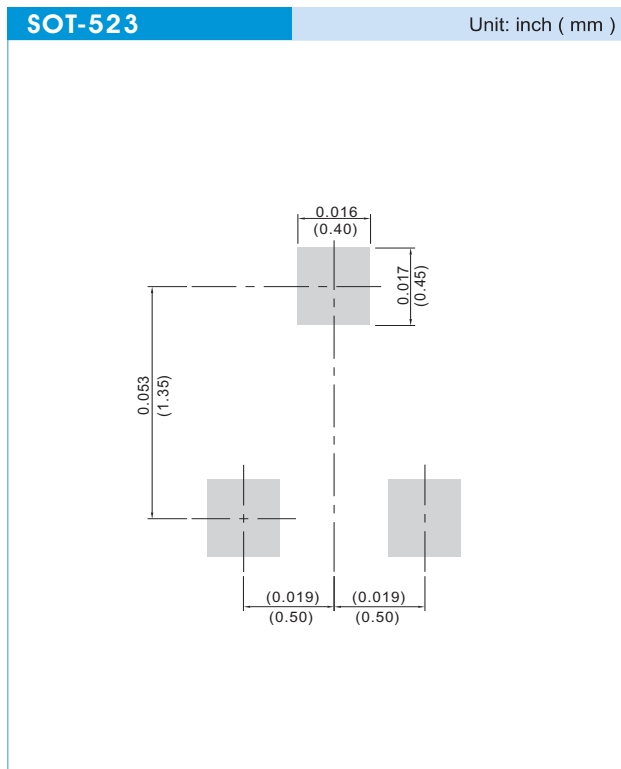


Fig.4 Typical Peak Clamping Voltage



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 4K per 7" plastic Reel

LEGAL STATEMENT

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