



PJSD05LCFN2

BI-DIRECTIONAL ESD PROTECTION DIODE

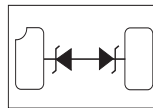
This bi-directional TVS has been designed to protect sensitive equipment against ESD and to prevent Latch-Up events in CMOS circuitry operating at 5Vdc and below. This offers an integrated solution to protect a single data line where the board space is a premium.

SPECIFICATION FEATURES

- 40W Power Dissipation (8/20 μ s Waveform)
- Low Leakage Current, Maximum of 1 μ A@5Vdc
- Very low Clamping voltage
- IEC 61000-4-2 ESD 15kV air, 8kV Contact Compliance
- In compliance with EU RoHS 2002/95/EC directivess
- Terminals : Solderable per MIL-STD-750, Method 2026
- Case : DFN 2L, Plastic
- Marking : BY

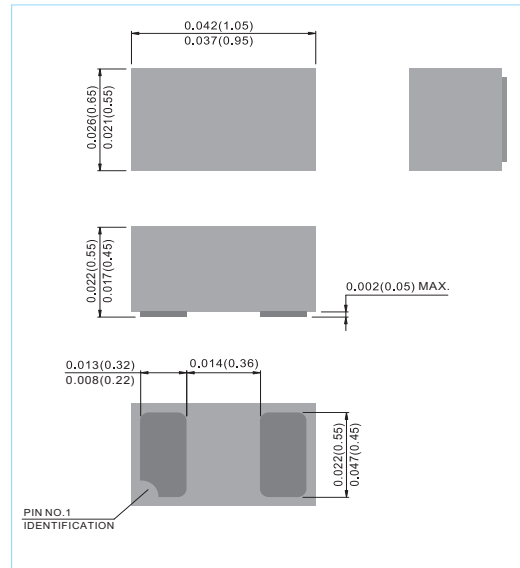
APPLICATIONS

- Video I/O ports protection
- Set Top Boxes
- Portable Instrumentation



DFN 2L

Unit : inch(mm)



MAXIMUM RATINGS

| Rating | Symbol | Value | Units |
|--|-----------------------------------|-------------|-------|
| Peak Pulse Power (8/20 μ s Waveform) | P _{PP} | 40 | W |
| Peak Pulse Current (8/20 μ s Waveform) | I _{PPM} | 4 | A |
| ESD Voltage (HBM) | V _{ESD} | >25 | kV |
| Operating Junction and Storage Temperature Range | T _J , T _{STG} | -55 to +150 | °C |

ELECTRICAL CHARACTERISTICS (T_R=25°C)

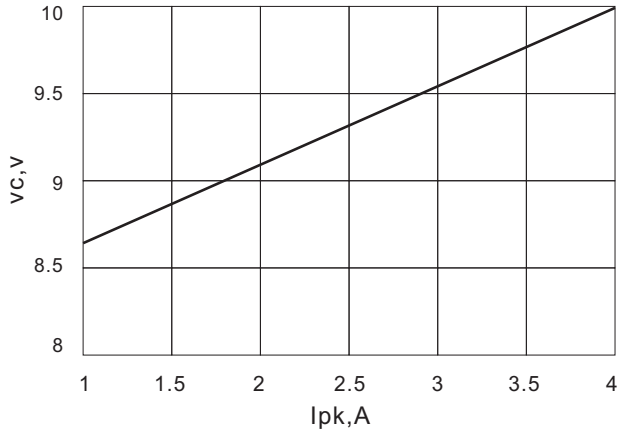
| Parameter | Symbol | Conditions | Min. | Typ. | Max. | Units |
|---------------------------------|------------------|----------------------|------|------|------|---------|
| Reverse Stand-Off Voltage | V _{WRM} | | - | - | 5.0 | V |
| Reverse Breakdown Voltage | V _{BR} | I _{BR} =1mA | 5.78 | - | 7.82 | V |
| Reverse Leakage Current | I _R | V _R =5V | - | - | 1.0 | μ A |
| Clamping Voltage (8/20 μ s) | V _C | I _{PP} =4A | - | - | 10 | V |
| Off State Junction Capacitance | C _J | 0 Vdc Bias f=1MHz | - | - | 15 | pF |

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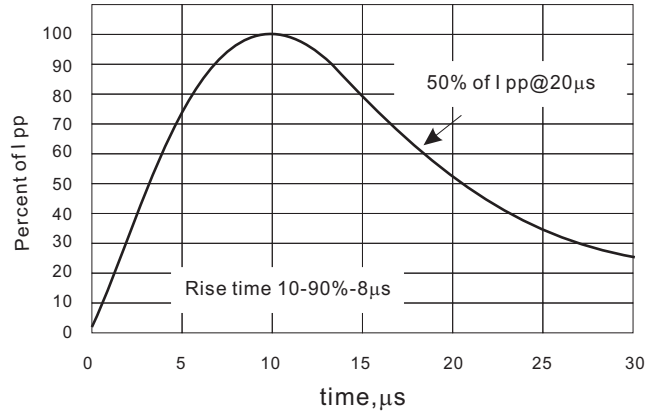


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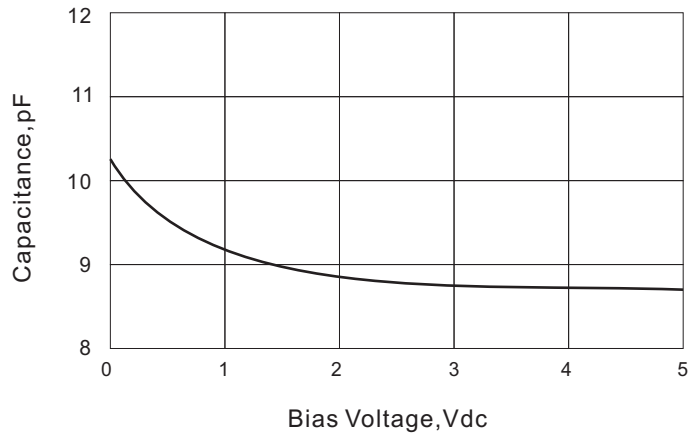
TYPICAL CHARACTERISTICS



Clamping Voltage vs I_{pp} 8/20µs Surge



Pulse Waveform

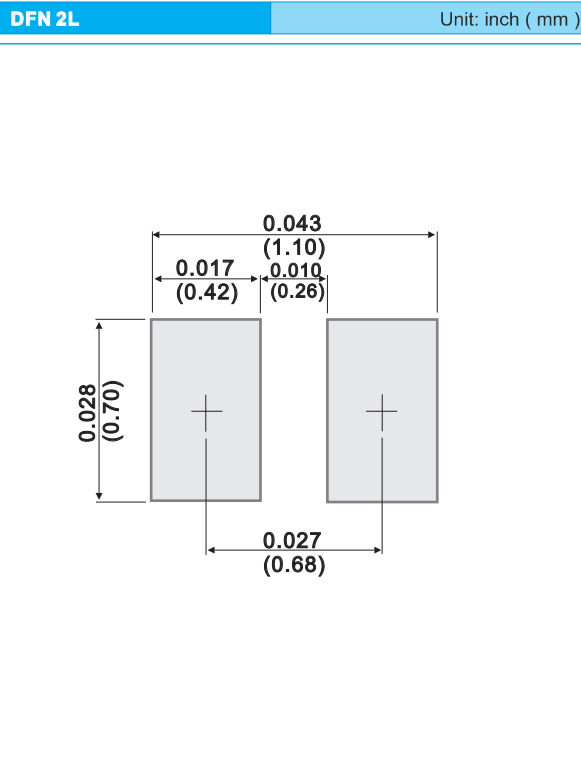


Capacitance vs. Biasing Voltage@1MHz



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 8K per 7" plastic Reel

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