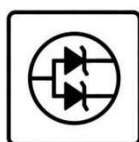


MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

ESD5431N

Product specification


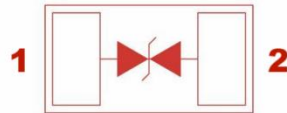

FEATURES

- low Capacitance 15pF
- Low Clamping Voltage
- Small Body Outline Dimensions: 0.039" x 0.024" (1.0 mm x0.60 mm)
- Low Body Height: 0.019" (0.5 mm)
- Stand-off Voltage: 3.3V
- Low Leakage
- Response Time is Typically < 1 ns
- IEC61000-4-2 Level 4 ESD Protection for data lines
- These are Pb-Free Devices

APPLICATIONS

- 10/100/Mbits/s Ethernet
- FireWire
- Display ports
- MDDI ports
- Digital Visual Interface (DVI)
- Cellular handsets & accessories
- Computer and peripherals

Reference News

| PACKAGE OUTLINE | PIN CONFIGURATION | Marking |
|--|---|--|
|  DFN-1006 |  |  |

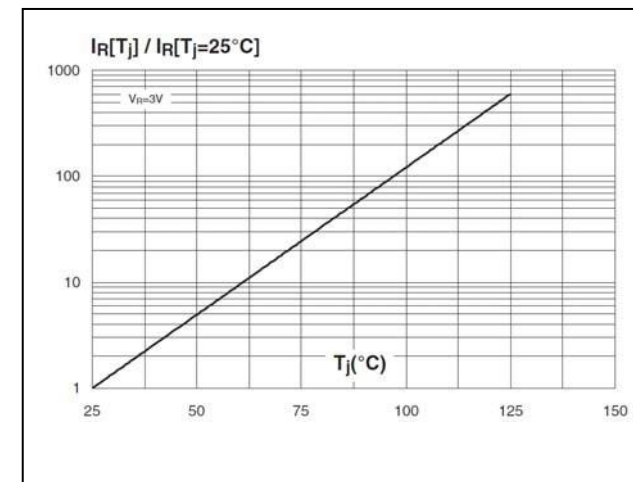
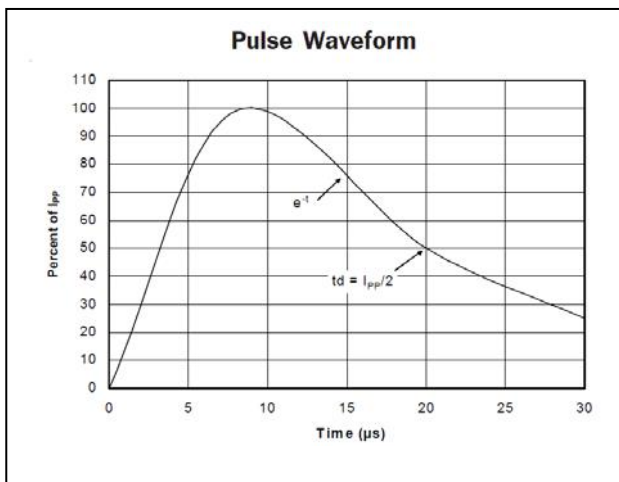
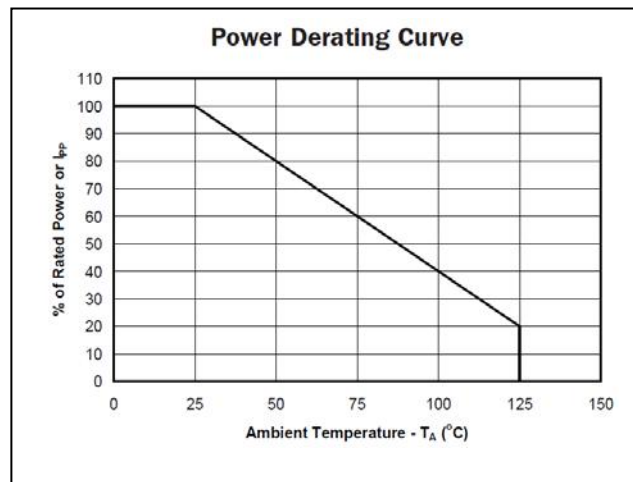
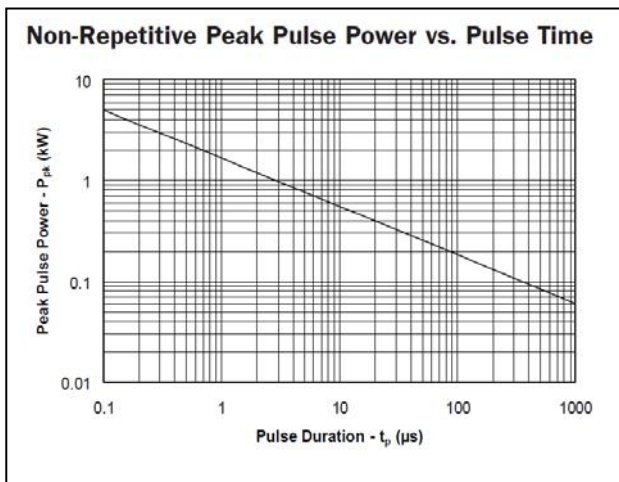
Maximum Rating @ Ta=25°C unless otherwise specified

| Symbol | Parameter | Ratings | Units |
|------------------|----------------------------|--------------|-------|
| ESD | IEC 61000-4-2 (HBM-ESD) | Contact | 25 |
| | | Air | 25 |
| T _L | Lead Soldering Temperature | 260(10sec.) | °C |
| T _J | Operating Temperature | -55 to +125 | °C |
| T _{STG} | Storage Temperature | -55 to +150 | °C |

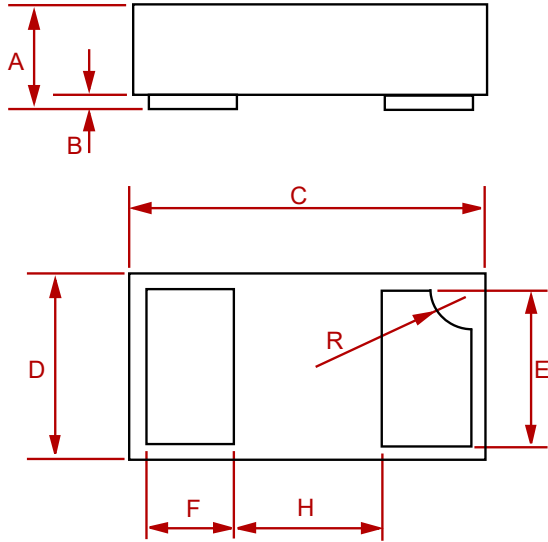
Electrical Characteristics@ Ta=25°C unless otherwise

| P/N | VRWM @IR | | VBR@ImA | Vc@1A | Vc@IPP | | CJ |
|----------|----------|-----|---------|-------|--------|---|-----|
| | V | μA | V | V | V | A | pF |
| | | MAX | MIN | MAX | MAX | | TYP |
| ESD5431N | 3.3 | 1 | 5.0 | 7 | 10 | 8 | 15 |

Typical Characteristics@ Ta=25°C unless otherwise specified

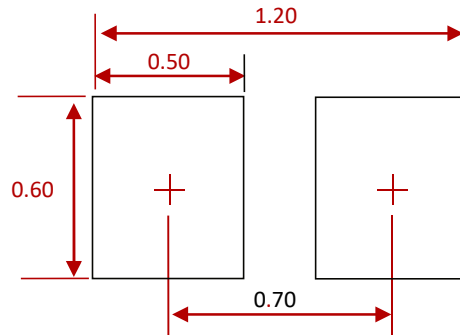


PACKAGE MECHANICAL DATA



| Dim | Inches | | Millimeters | |
|-----|-----------|-------|-------------|-------|
| | MIN | MAX | MIN | MAX |
| A | 0.0125 | 0.02 | 0.32 | 0.52 |
| B | 0.000 | 0.002 | 0.00 | 0.05 |
| C | 0.037 | 0.043 | 0.95 | 1.080 |
| D | 0.022 | 0.027 | 0.55 | 0.680 |
| E | 0.016 | 0.024 | 0.40 | 0.60 |
| F | 0.008 | 0.012 | 0.20 | 0.30 |
| H | 0.015Typ. | | 0.40Typ. | |
| R | 0.001 | 0.005 | 0.05 | 0.15 |

Suggested Pad Layout



NOTES:

1. CONTROLLING DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES).
2. THIS LAND PATTERN IS FOR REFERENCE PURPOSES ONLY. CONSULT YOUR MANUFACTURING GROUP TO ENSURE YOUR COMPANY'S MANUFACTURING GUIDELINES ARE MET.

REEL SPECIFICATION

| P/N | PKG | QTY |
|---------|---------|-------|
| ESD431N | DFN1006 | 10000 |

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