

FEATURES

- ✓ Protects 3.3, 5, 12, 15, 24 V Components
- ✓ Bidirectional
- ✓ Provides Electrically Isolated Protection
- ✓ 300 W @ 8/20 μs
- ✓ Protects 4 Lines
- ✓ SO-8 Packaging
- ✓ LOW CAPACITANCE: 5PF
- ✓ This is a Pb - Free Device
- ✓ All SMC parts are traceable to the wafer lot
- ✓ Additional testing can be offered upon request

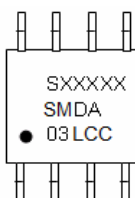
DESCRIPTION

The SMDAXLCC series of TVS array have been designed to provide bidirectional protection for sensitive electronics from damage due to voltage transients caused by electrostatic discharge (ESD), electrical fast transients (EFT), lightning and other voltage-induced transient events. The device can be used to protect combinations of four bidirectional lines.

APPLICATION

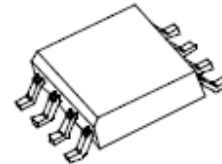
- ✓ RS-232 & RS-422 Data Lines
- ✓ Microprocessor Based Equipment
- ✓ Notebooks, Desktops, & Servers
- ✓ LAN/WAN Equipment
- ✓ Serial and Parallel Port
- ✓ Peripherals

MARKING DIAGRAM

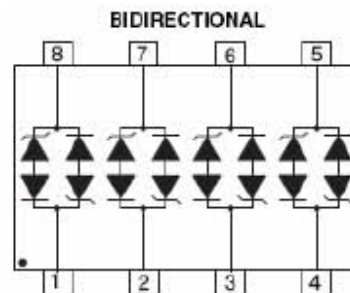


TVS ARRAY SERIES

SO-8



SCHEMATIC & PIN CONFIGURATION



MECHANICAL CHARACTERISTICS

- ✓ SO-8 Surface Mount Package
- ✓ Approximate Weight: 0.1 grams
- ✓ PIN #1 Indicator: DOT on top of package
- ✓ Packaging: Tubes or Tape & Reel per EIA Standard 481

Where XXXXX is YYWWL

SMDA03LCC = Part Name
S = S
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Ordering Information:

| Device | Package | Shipping |
|--------------------------|----------------|----------------|
| SMDA03LCC THRU SMDA24LCC | SO-8 (Pb-Free) | 2500pcs / reel |

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

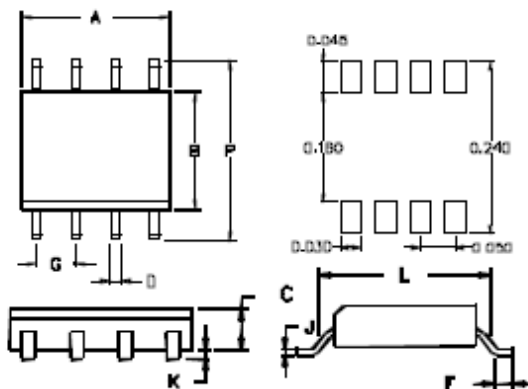
ABSOLUTE MAXIMUM RATINGS

| Symbol | Parameter | Value | Unit |
|------------------|--|---------------|------|
| P | Peak Pulse Power, 8/20 μ s Waveshape | 300 | W |
| T _J | Operating Temperature | -55 to +125 | °C |
| T _{STG} | Storage Temperature | -55 to +150 | °C |
| T _L | Lead Soldering Temperature | 260 (10 Sec.) | °C |

ELECTRICAL CHARACTERISTICS @ 25 °C

| Part Number | Stand-off Voltage V_{wm} (v) Max | Breakdown Voltage V_{BR} @1mA (V) Min | Clamping Voltage V_c @ 1 A (V) Max | Leakage Current I_R @ V_{wm} (μ A) Max | Capacitance (f = 1MHz) C @ 0V (pF) Max | Temperature Coefficient of V_{BR} $a(V_{BR})$ mV/°C Max |
|-------------|---|---|--|---|---|--|
| SMDA03LCC | 3.3 | 4 | 7 | 200 | 5 | -5 |
| SMDA05LCC | 5.0 | 6 | 9.8 | 40 | 5 | 1 |
| SMDA12LCC | 12.0 | 13.3 | 19 | 1 | 5 | 8 |
| SMDA15LCC | 15.0 | 16.7 | 24 | 1 | 5 | 11 |
| SMDA24LCC | 24.0 | 26.7 | 43 | 1 | 5 | 28 |

PACKAGE OUTLINES & DEMENSIONS



| DIM | INCHES | | MILLIMETERS | |
|-----|-----------|-------|-------------|------|
| | MIN. | MAX | MIN. | MAX. |
| A | 0.189 | 0.196 | 4.8 | 5.0 |
| B | 0.150 | 0.157 | 3.8 | 4.0 |
| C | 0.053 | 0.069 | 1.35 | 1.75 |
| D | 0.011 | 0.021 | 0.28 | 0.53 |
| F | 0.016 | 0.050 | 0.41 | 1.27 |
| G | 0.050 BSC | | 1.27 BSC | |
| J | 0.006 | 0.010 | 0.15 | 0.25 |
| K | 0.004 | 0.008 | 0.10 | 0.20 |
| L | 0.189 | 0.206 | 4.80 | 5.23 |
| P | 0.228 | 0.244 | 5.79 | 6.19 |

TYPICAL CHARACTERISTICS

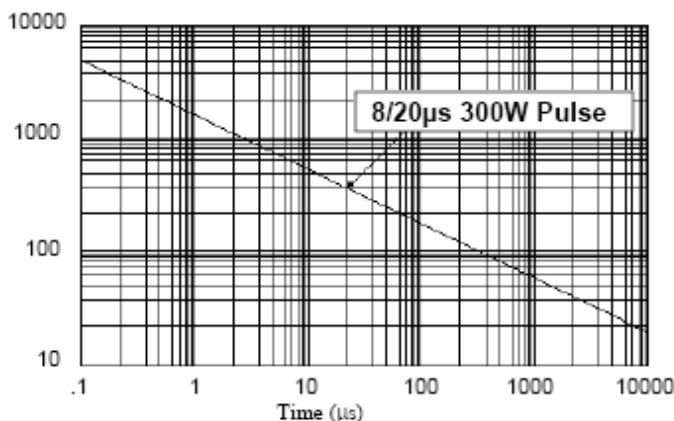


Figure 1. Peak Pulse Power Vs Pulse Time (μ s)

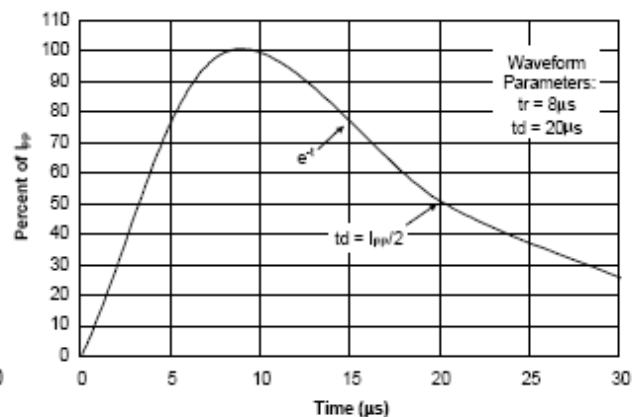


Figure 2. Pulse Wave Form

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