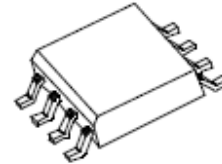


TVS ARRAY SERIES

FEATURES

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

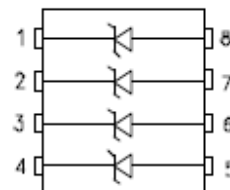
SO-8



DESCRIPTION

The SMDAXX series of TVS array have been designed to provide unidirectional 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 unidirectional lines.

SCHEMATIC & PIN CONFIGURATION



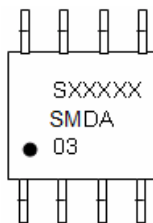
APPLICATION

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

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

MARKING DIAGRAM



Where XXXXX is YYWWL

- SMDA03 = Part Name
- S = S
- YY = Year
- WW = Week
- L = Lot Number

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

Ordering Information:

| Device | Package | Shipping |
|--------------------|----------------|----------------|
| SMDA03 THRU SMDA24 | 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.

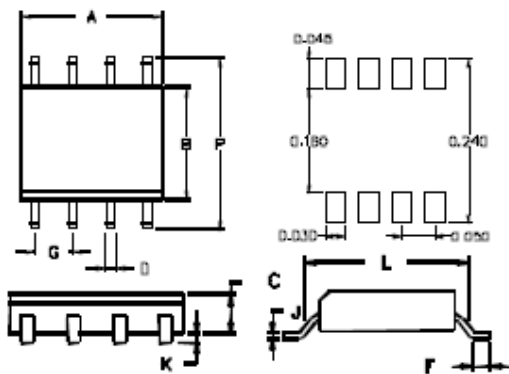
ABSOLUTE MAXIMUM RATINGS

| 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} (V_{BR}) mV/°C Max |
|-------------|---------------------------------------------|-----------------------------------------------------|--------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------|
| SMDA03 | 3.3 | 4 | 7 | 200 | 800 | -3 |
| SMDA05 | 5.0 | 6 | 9.8 | 20 | 600 | 3 |
| SMDA12 | 12.0 | 13.3 | 19 | 1 | 185 | 10 |
| SMDA15 | 15.0 | 16.7 | 24 | 1 | 140 | 13 |
| SMDA24 | 24.0 | 26.7 | 43 | 1 | 90 | 30 |

PACKAGE OUTLINES & DIMENSIONS



| 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

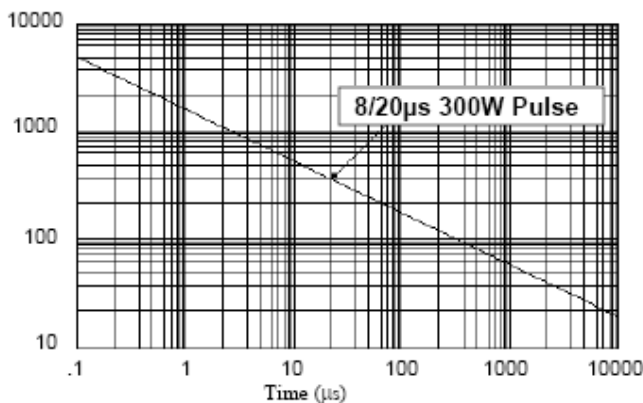


Figure 1. Peak Pulse Power Vs Pulse Time (μ s)

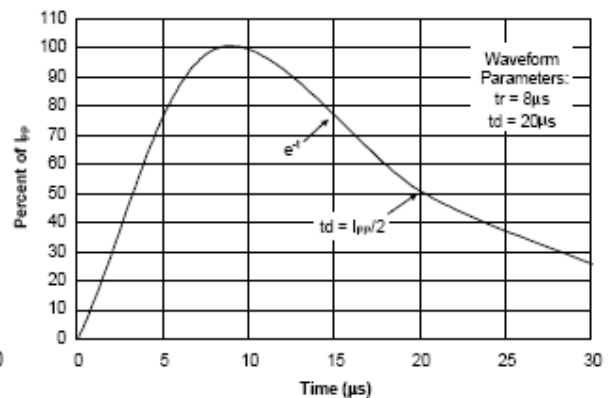


Figure 2. Pulse Wave Form

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