

STANDARD CAPACITANCE TVS ARRAY

APPLICATIONS

- ✓ Notebook Computers
- ✓ Cellular Phone Base Stations
- ✓ Personal Digital Assistant (PDA)
- ✓ Digital Cameras

IEC COMPATIBILITY (EN61000-4)

- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns

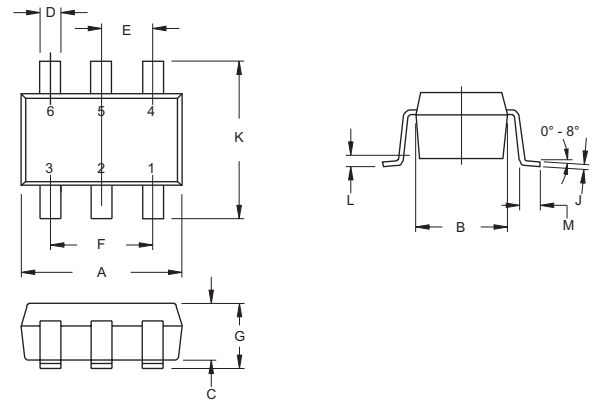
FEATURES

- ✓ 100 Watts Peak Pulse Power per Line ($t_p=8/20\mu s$)
- ✓ Monolithic Design
- ✓ Available in Multiple Voltage Types Ranging From 5V to 24V
- ✓ Protect 4 Lines Bidirectional and 5 Lines Unidirectional
- ✓ ESD Protection > 25 kilovolts
- ✓ Low Clamping Voltage
- ✓ RoHS Compliant in Lead-Free Versions

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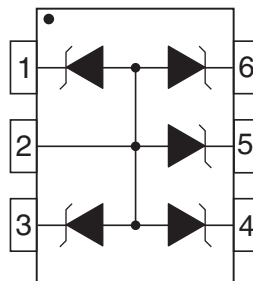


PACKAGE OUTLINE



| DIM | PACKAGE DIMENSIONS | | | |
|-----|--------------------|------|------------|-------|
| | MILLIMETERS | | INCHES | |
| | MIN | MAX | MIN | MAX |
| A | 1.90 | 2.15 | 0.074 | 0.084 |
| B | 1.15 | 1.35 | 0.045 | 0.055 |
| C | 0.80 | 1.00 | 0.031 | 0.040 |
| D | 0.15 | 0.30 | 0.006 | 0.012 |
| E | 0.65 BSC | - | 0.0255 BSC | - |
| F | 1.30 BSC | - | 0.0512 BSC | - |
| G | 0.80 | 1.10 | 0.031 | 0.043 |
| J | 0.08 | 0.25 | 0.003 | 0.010 |
| K | 2.00 | 2.20 | 0.078 | 0.086 |
| L | 0 | 0.10 | 0 | 0.004 |
| M | 0.26 | 0.46 | 0.010 | 0.018 |

PIN CONFIGURATIONS





DEVICE CHARACTERISTICS

| MAXIMUM RATINGS @ 25°C Unless Otherwise Specified | | | |
|---|-----------|----------------|-------|
| PARAMETER | SYMBOL | VALUE | UNITS |
| Peak Pulse Power ($t_p = 8/20\mu s$) - See Figure 1 | P_{PP} | 100 | Watts |
| Operating Temperature | T_J | -55°C to 150°C | °C |
| Storage Temperature | T_{STG} | -55°C to 150°C | °C |

| ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified | | | | | | |
|---|-------------------------|------------------------------|---------------------------------------|---------------------------------------|--------------------------------|----------------------------------|
| PART NUMBER | RATED STAND-OFF VOLTAGE | MINIMUM BREAKDOWN VOLTAGE | MAXIMUM CLAMPING VOLTAGE (See Fig. 2) | MAXIMUM CLAMPING VOLTAGE (See Fig. 2) | MAXIMUM LEAKAGE CURRENT | TYPICAL CAPACITANCE (See Note 1) |
| | V_{WM} VOLTS | @ 1mA $V_{(BR)}$ VOLTS | @ $I_p = 5A$ V_C VOLTS | @ 8/20 μs $V_C @ I_{PP}$ | @ V_{WM} I_D μA | @ 0V, 1 MHz C_J pF |
| SMF05CT | 5.0 | 6.0 | 9.8 | 12.0V @ 9.0A | 5 | 60 |
| SMF12CT | 12.0 | 13.3 | - | 23.8V @ 4.2A | 1 | 30 |
| SMF15CT | 15.0 | 16.7 | - | 33.3V @ 3.0A | 1 | 25 |
| SMF24CT | 24.0 | 26.7 | - | 55.5V @ 1.8A | 1 | 20 |

Note 1: Pins 1, 3, 4, 5 or 6 to pin 2.

FIGURE 1
PEAK PULSE POWER VS PULSE TIME

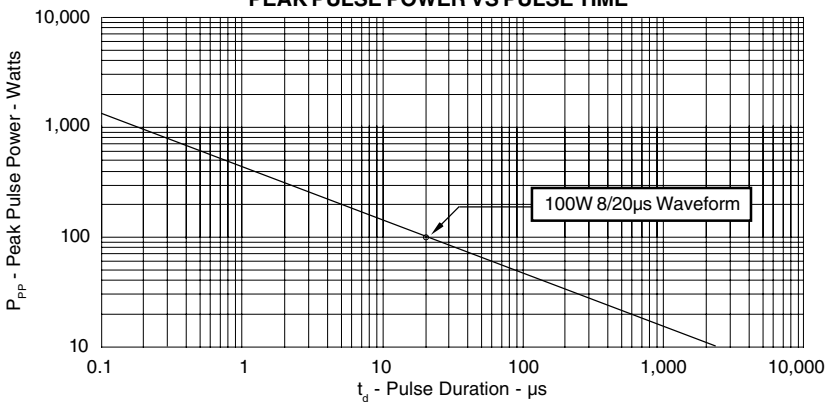
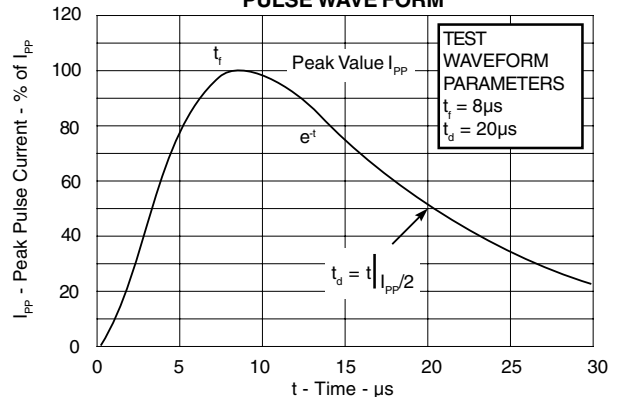


FIGURE 2
PULSE WAVE FORM



GRAPHS

