

LOW CAPACITANCE TVS ARRAY

APPLICATIONS

- ✓ Set-Top Boxes
- ✓ Modems
- ✓ Computers
- ✓ Printers
- ✓ Communication Systems

IEC COMPATIBILITY (EN61000-4)

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

FEATURES

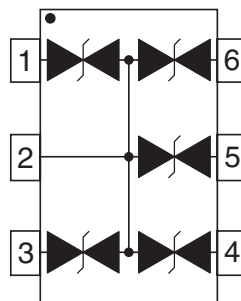
- ✓ ESD Protection > 25 kilovolts
- ✓ 80 Watt Peak Pulse Power per Line (tp = 8/20µs)
- ✓ Low Clamping Voltage
- ✓ Provides Five (5) Lines of Protection
- ✓ Bidirectional Configuration
- ✓ **LOW LEAKAGE CURRENT < 1.0µA**
- ✓ **LOW CAPACITANCE: 15pF Per Diode**
- ✓ RoHS Compliant on Lead-Free Versions

MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SOT-23-6
- ✓ Weight 16 milligrams (Approximate)
- ✓ Available in Tin-Lead or Lead-Free Pure-Tin Plating(Annealed)
- ✓ Solder Reflow Temperature:
 - Tin-Lead - Sn/Pb, 85/15: 240-245°C
 - Pure-Tin - Sn, 100: 260-270°C
- ✓ Flammability rating UL 94V-0
- ✓ 8mm Tape and Reel Per EIA Standard 481
- ✓ Marking: Marking Code & Pin One Defined By DOT on Top of Package



PIN CONFIGURATION



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}	80	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 (See Note 1)	DEVICE MARKING	RATED STAND-OFF VOLTAGE V_{WM} VOLTS	MINIMUM BREAKDOWN VOLTAGE @ 1mA $V_{(BR)}$ VOLTS	MAXIMUM LEAKAGE CURRENT @ V_{WM} I_D μA	TYPICAL CAPACITANCE (See Note 2) @ 0V, 1 MHz C pF
ESDA05C-5	ED5	5.0	6.1	1	15

Note 1: *Bidirectional Only:* Test between pins 2 to 1, 2 to 6, 2 to 5, 2 to 4 and 2 to 3. Electrical characteristics apply in both directions.

Note 2: *Bidirectional Only:* Capacitance measured between pins 1, 3, 4, 5, and 6 to 2.

GRAPHS

FIGURE 1
PEAK PULSE POWER VS PULSE TIME

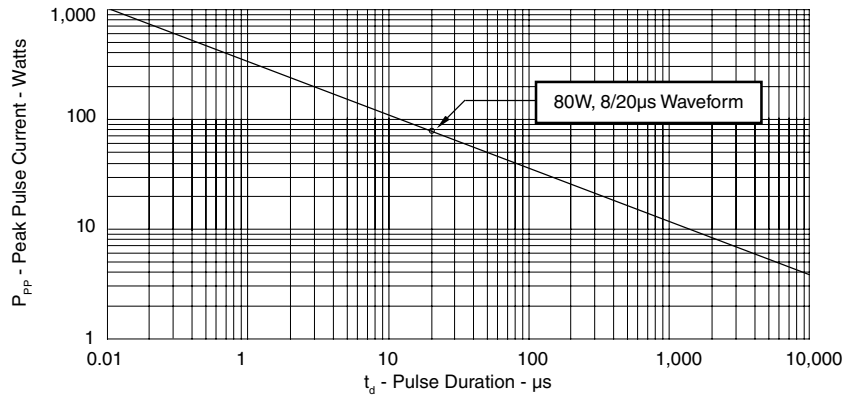


FIGURE 2
PULSE WAVE FORM

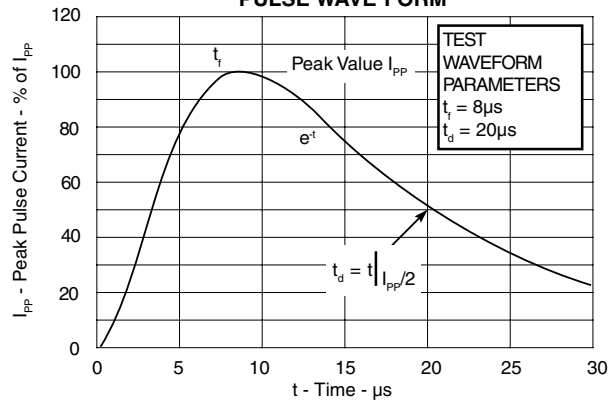
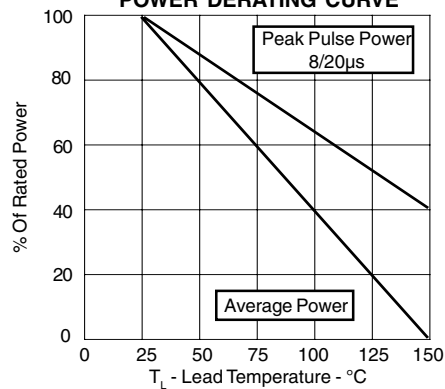
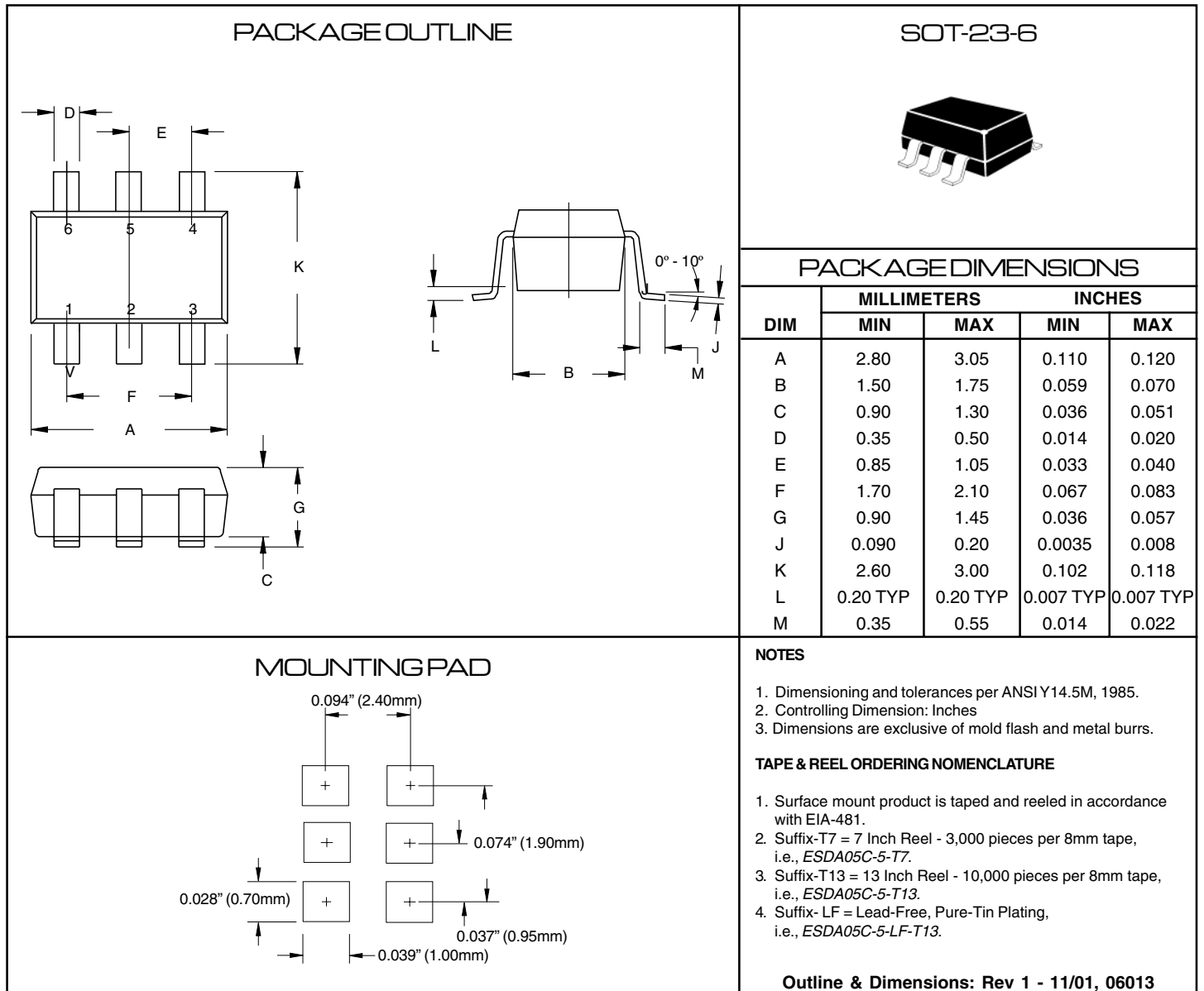


FIGURE 3
POWER DERATING CURVE



PACKAGE OUTLINE & DIMENSIONS



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