

LOW CAPACITANCE TVS ARRAY**APPLICATIONS**

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

IEC COMPATIBILITY (EN61000-4)

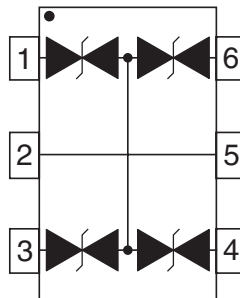
- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns

FEATURES

- ✓ 80 Watts Peak Pulse Power per Line ($t_p=8/20\mu s$)
- ✓ ESD Protection > 25 kilovolts
- ✓ Protect Four(4) Line of Protection
- ✓ Low Clamping Voltage
- ✓ Bidirectional Configuration
- ✓ Low Leakage Current < 1.0 μA
- ✓ Low Capacitance: 15pF per Diode
- ✓ RoHS Compliant

MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SOT-23-6 Package
- ✓ Weight 16 milligrams (Approximate)
- ✓ Available in Lead-Free Pure-Tin Plating(Annealed)
- ✓ Solder Reflow Temperature:
Pure-Tin - Sn, 100: 260-270°C
- ✓ Consult Factory for Leaded Device Availability
- ✓ Flammability Rating UL 94V-0
- ✓ 8mm Tape and Reel Per EIA Standard 481
- ✓ Marking: Marking Code & Pin One Defined By DOT on Package

**PIN CONFIGURATION**

ESDA05C-4

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_L	-55 to 150	°C
Storage Temperature	T_{STG}	-55 to 150	°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_b μA	TYPICAL CAPACITANCE 0V @ 1 MHz C pF
ESDA05C-4	ED4	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

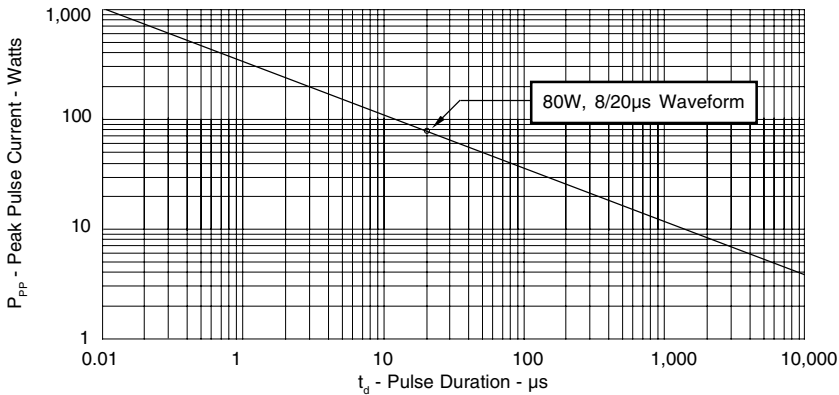


FIGURE 2
PULSE WAVE FORM

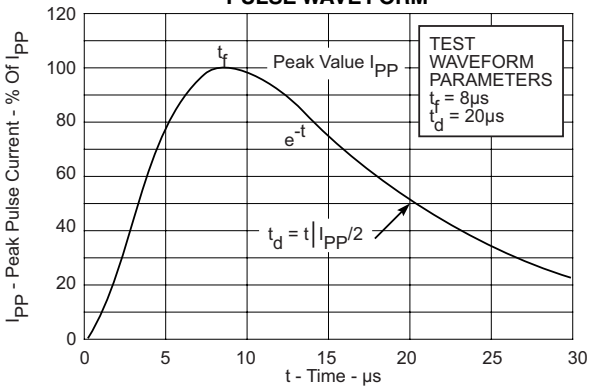
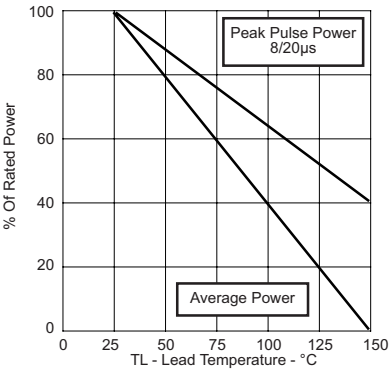
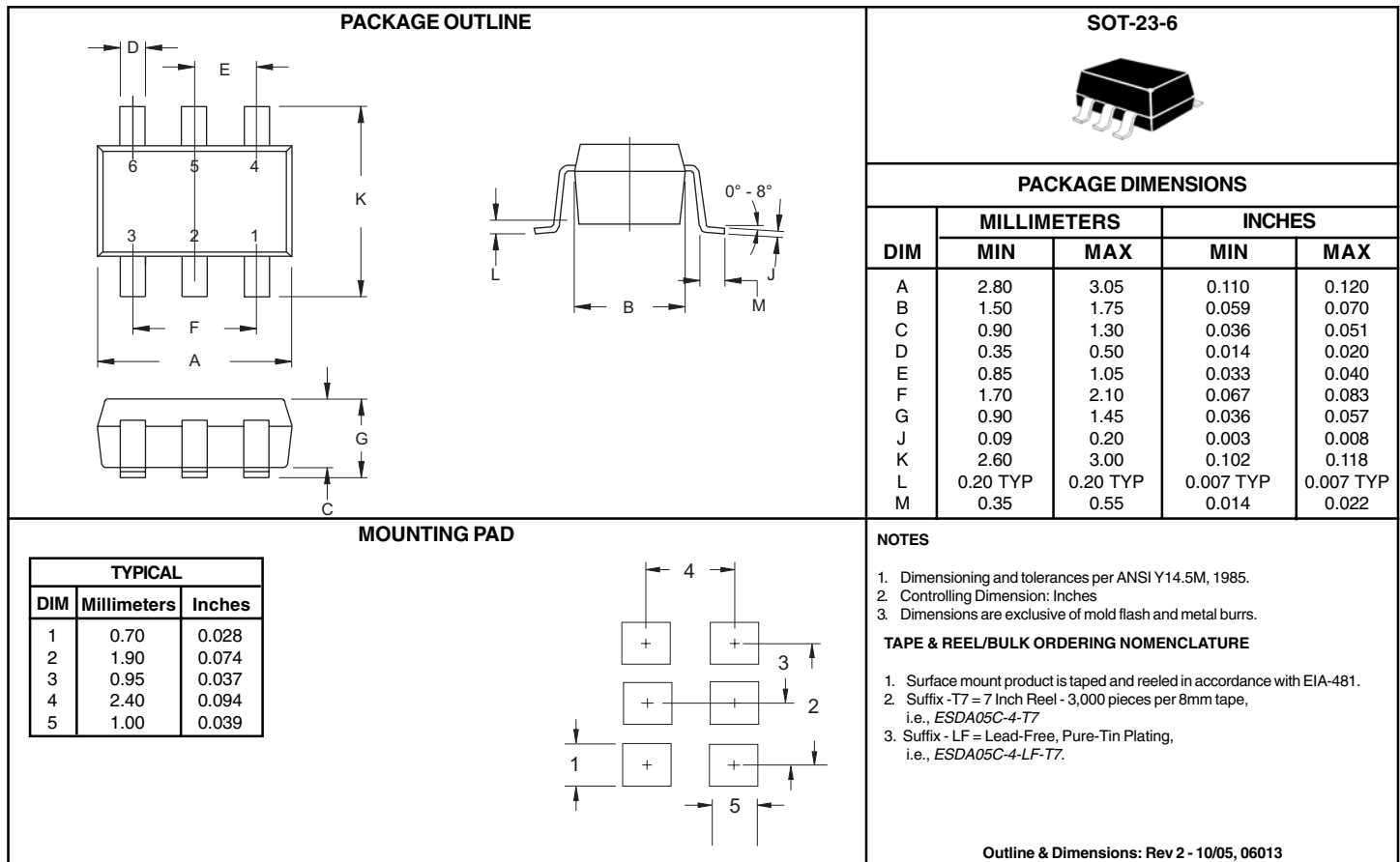


FIGURE 3
POWER DERATING CURVE



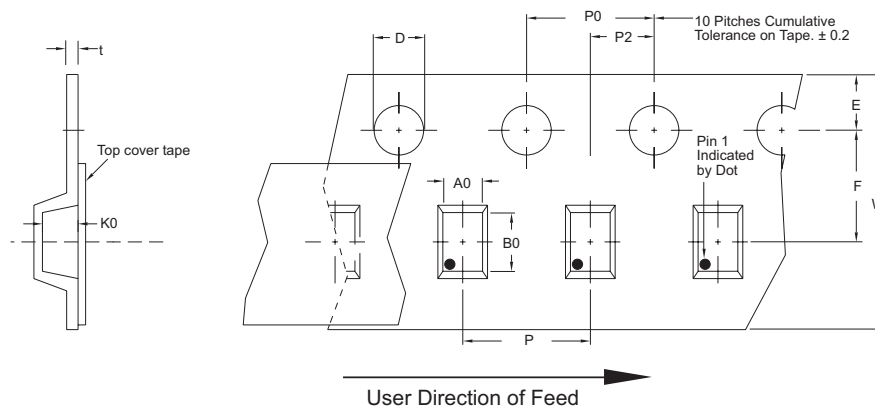
ESDA05C-4

SOT-23-6 PACKAGE OUTLINE & DIMENSIONS



Tape & Reel Specifications (Dimensions in millimeters)

Reel Dia.	Tape Width	A0	B0	K0	D	E	F	W	P0	P2	P	tmax
178mm (7")	8mm	3.20 ± 0.10	3.20 ± 0.10	1.65 ± 0.10	1.50 ± 0.10	1.75 ± 0.10	3.50 ± 0.05	8.00 ± 0.30	4.00 ± 0.10	2.00 ± 0.05	4.00 ± 0.10	0.25



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