



DATA SHEET

SEMICONDUCTOR

YSUSB2.0-5

LOW CAPACITANCE TVS DIODE ARRAY



APPLICATIONS

- ◆ USB 2.0 Power and Data Line Protection
- ◆ Video Graphics Cards
- ◆ Monitors and Flat Panel Displays
- ◆ Digit Video Interface (DVI)
- ◆ 10/100/1000 Ethernet
- ◆ Notebook Computers
- ◆ SIM Ports
- ◆ ATM Interfaces

IEC COMPATIBILITY

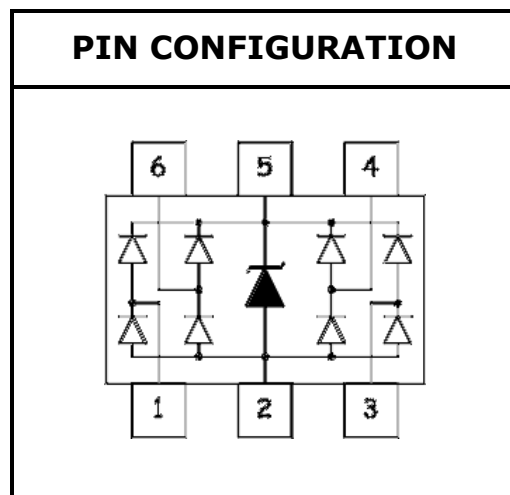
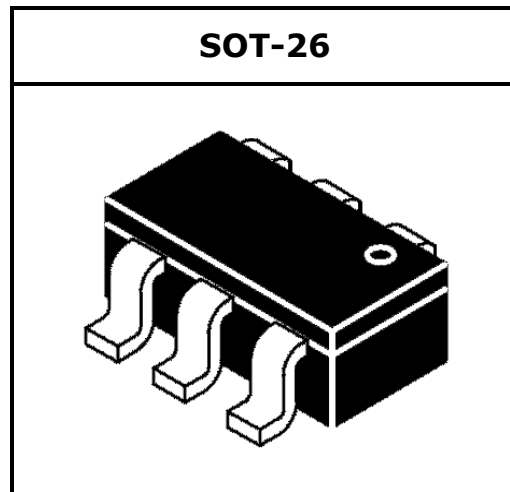
- ◆ IEC61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
- ◆ IEC61000-4-4 (EFT) 40A (5/50 η s)

FEATURES

- ◆ 80 Watts Peak Pulse Power per Line ($t_p=8/20\mu\text{s}$)
- ◆ Protects four I/O lines
- ◆ Low clamping voltage
- ◆ Working voltages : 5V
- ◆ Low leakage current

MECHANICAL CHARACTERISTICS

- ◆ SOT-26 Package
- ◆ Molding Compound Flammability Rating : UL 94V-0
- ◆ Weight 16 Milligrams (Approximate)
- ◆ Quantity Per Reel : 3,000pcs
- ◆ Reel Size : 7 inch
- ◆ Lead Finish : Lead Free



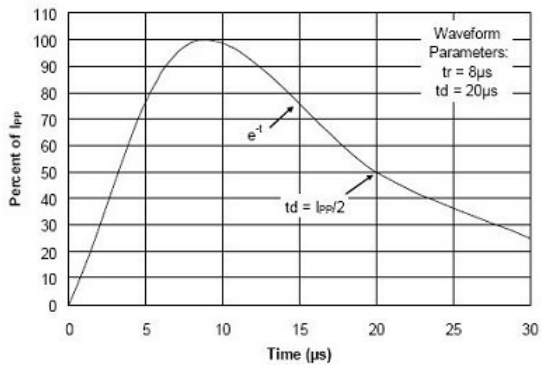
DEVICE CHARACTERISTICS

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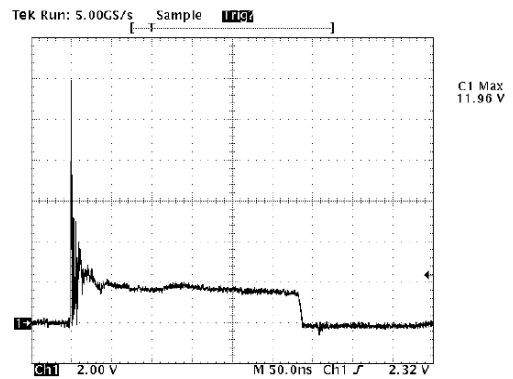
MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20µs waveform)	P _{PP}	80	Watts
Lead Soldering Temperature	T _L	260 (10 sec.)	°C
Operating Temperature Range	T _J	-55 ~ 150	°C
Storage Temperature Range	T _{STG}	-55 ~ 150	°C

ELECTRICAL CHARACTERISTICS PER LINE (@ 25°C Unless Otherwise Specified)									
PART NUMBER	DEVICE MARKING	V _{RWM} (V) (max.)	V _B (V) (min.)	I _T (mA)	V _C @1A (max.)	V _C (max.) (@A)	I _R (µA) (max.)	C _T (pF) (typ.)	
YSUSB2.0-5	YB05	5.0	6.0	1	9.8	23.0	1.7	1	1

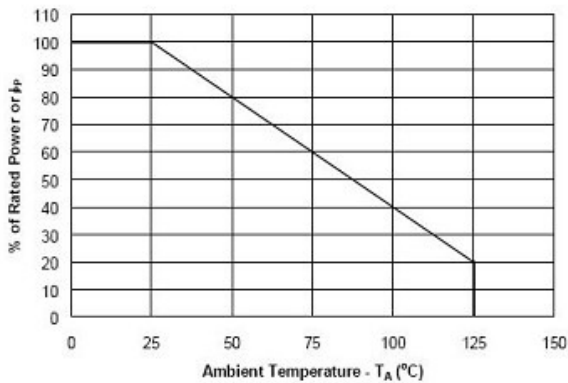
Pulse Waveform



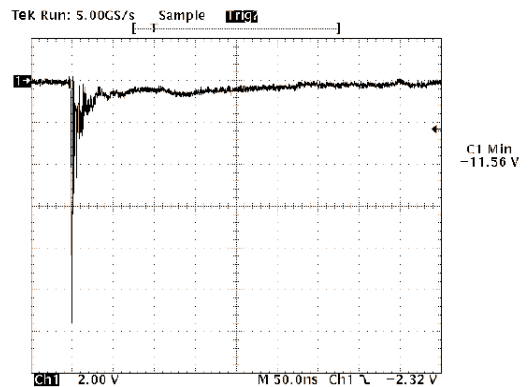
ESD Clamping (8kV Contact per IEC 61000-4-2)



Power Derating Curve

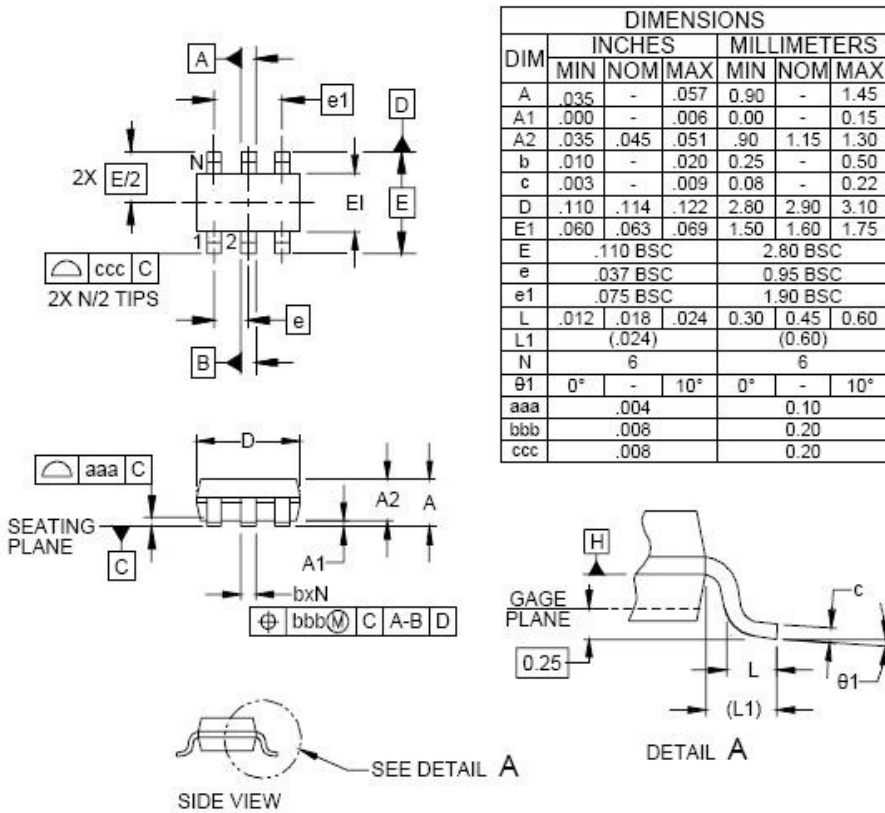


ESD Clamping (-8kV Contact per IEC 61000-4-2)



PACKAGE OUTLINE & DIMENSIONS

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* SOLDERING FOOTPRINT

