



# DATA SHEET

SEMICONDUCTOR

YSAZ5V6D3

## TVS DIODE ARRAY FOR LATCH-UP PROTECTION



### APPLICATIONS

- ◆ Cellular Handsets and Accessories
- ◆ Portable Electronics
- ◆ Industrial Controls
- ◆ Set-Top Box
- ◆ Instrumentation
- ◆ Servers, Notebook, and Desktop PC

### IEC COMPATIBILITY

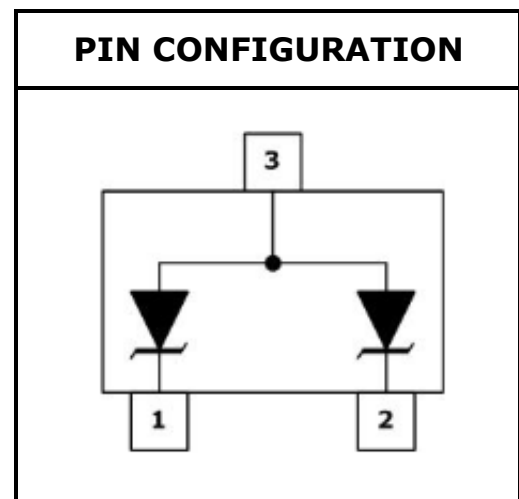
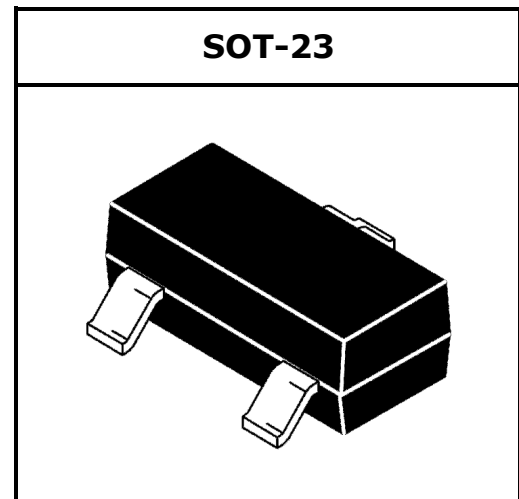
- ◆ IEC61000-4-2 (ESD)  $\pm 30\text{kV}$  (air),  $\pm 30\text{kV}$  (contact)
- ◆ IEC61000-4-4 (EFT) 40A (5/50  $\eta$  s)
- ◆ IEC61000-4-5 (Lighting) 5A (8/20  $\mu$  s)

### FEATURES

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

### MECHANICAL CHARACTERISTICS

- ◆ JEDEC SOT-23 Package
- ◆ Molding Compound Flammability Rating : UL 94V-0
- ◆ Weight 8 Milligrams (Approximate)
- ◆ Quantity Per Reel : 3,000pcs
- ◆ Reel Size : 7 inch
- ◆ Lead Finish : Lead Free



# DEVICE CHARACTERISTICS

## YSAZ5V6D3

MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20µs waveform)	P <sub>PP</sub>	100	Watts
Lead Soldering Temperature	T <sub>L</sub>	260 (10 sec.)	°C
Operating Temperature Range	T <sub>J</sub>	-55 ~ 150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 ~ 150	°C

ELECTRICAL CHARACTERISTICS PER LINE (@ 25°C Unless Otherwise Specified)									
PART NUMBER	DEVICE MARKING	V <sub>RWM</sub>	V <sub>B</sub>	I <sub>T</sub>	V <sub>C</sub>	V <sub>C</sub>		I <sub>R</sub>	C <sub>T</sub>
		(V) (max.)	(V) (min.)	(mA)	@1A (max.)	(max.)	(@A)	(µA) (max.)	(pF) (typ.)
YSAZ5V6D3	Y05C	5	6	1	9.8	17	5	1	30

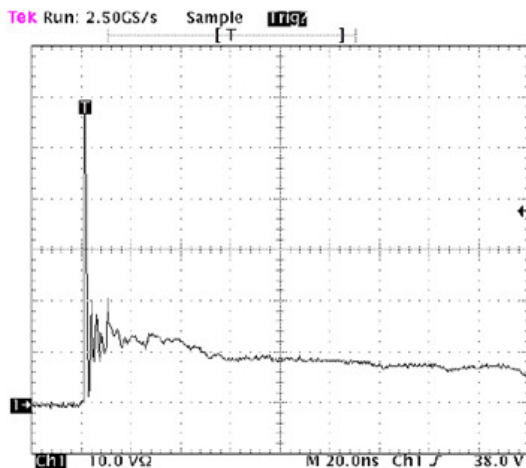
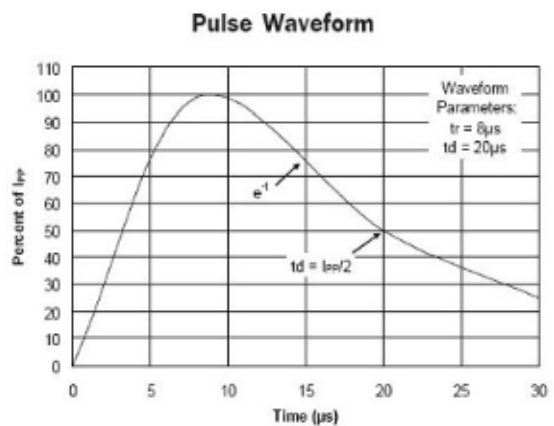
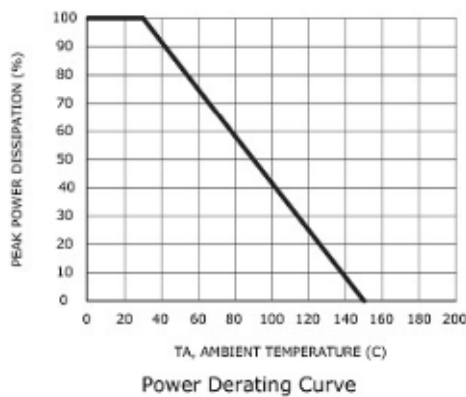


Figure 1. ESD Clamping Voltage Screenshot Positive 8 kV contact per IEC 61000-4-2

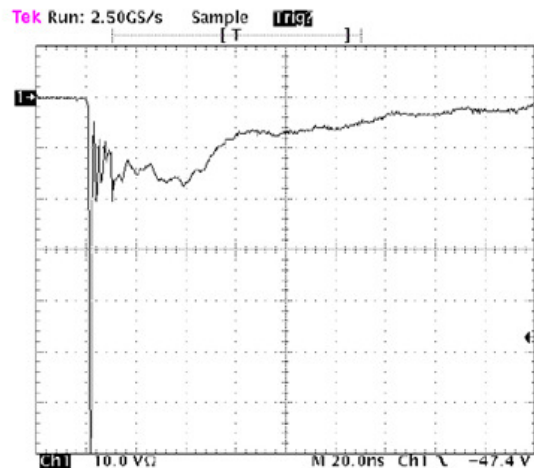
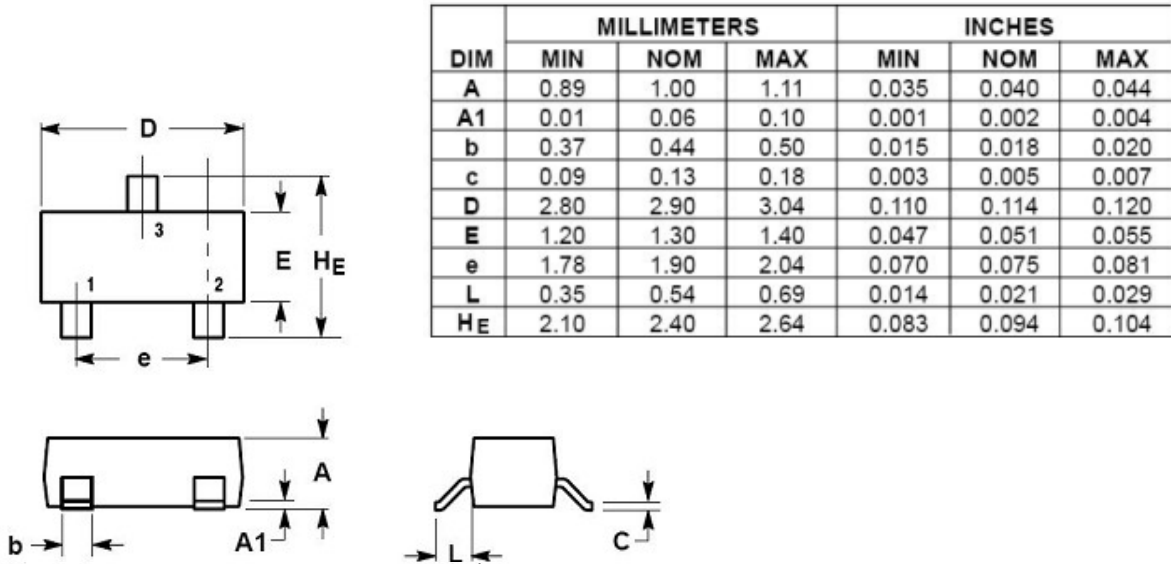


Figure 2. ESD Clamping Voltage Screenshot Negative 8 kV contact per IEC 61000-4-2

# PACKAGE OUTLINE & DIMENSIONS

## YSAZ5V6D3



### \* SOLDERING FOOTPRINT

