



DATA SHEET

SEMICONDUCTOR

YSOTxxCU

TVS Diode Array



APPLICATIONS

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

IEC COMPATIBILITY

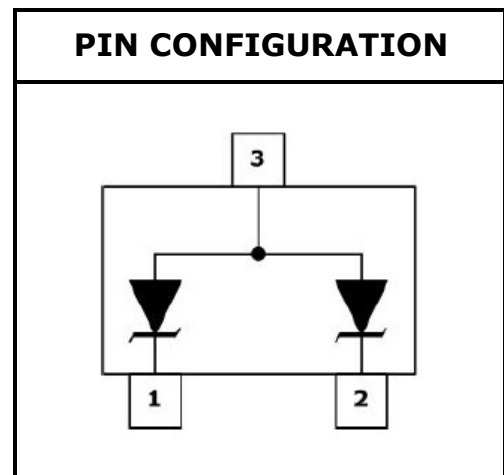
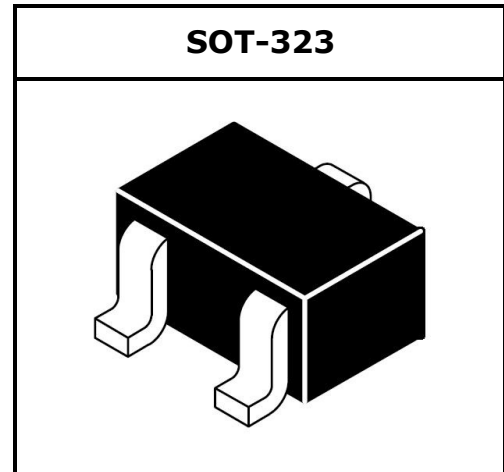
- ◆ IEC61000-4-2 (ESD) $\pm 25\text{kV}$ (air), $\pm 15\text{kV}$ (contact)
- ◆ IEC61000-4-4 (EFT) 40A (5/50 η s)

FEATURES

- ◆ 200 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, 12V, 15V and 24V
- ◆ Low leakage current

MECHANICAL CHARACTERISTICS

- ◆ JEDEC SOT-323 Package
- ◆ Molding Compound Flammability Rating : UL 94V-0
- ◆ Weight 6 Milligrams (Approximate)
- ◆ Quantity Per Reel : 3,000pcs
- ◆ Reel Size : 7 inch
- ◆ Lead Finish : Lead Free



DEVICE CHARACTERISTICS

YSOTxxCU

MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20µs waveform)	P _{PP}	200	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 _B	I _T	V _C	V _C		I _R	C _T
		(V) (max.)	(V) (min.)	(mA)	@1A (max.)	(max.)	(@A)	(µA) (max.)	(pF) (max.)
YSOT03CU	3D	3	3.8	1	9	12	17	150	200
YSOT05CU	3E	5	6	1	9	17	15	5	110
YSOT12CU	3G	12	13.3	1	17	26	7	1	50
YSOT15CU	3H	15	16.7	1	25	30	6	1	45
YSOT24CU	3K	24	26.6	1	40	48	3	1	30

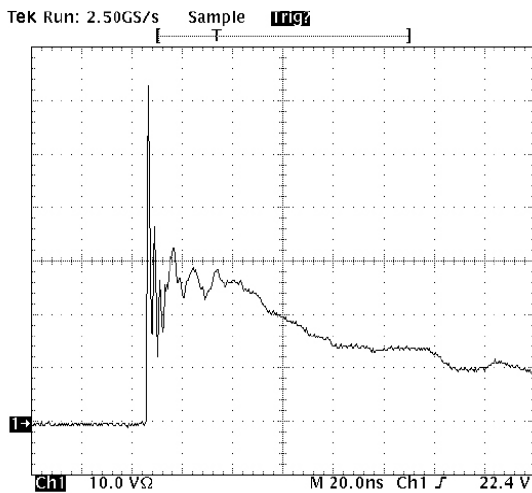


Figure 1. ESD Clamping Voltage Screenshot
Positive 8 kV Contact per IEC61000-4-2

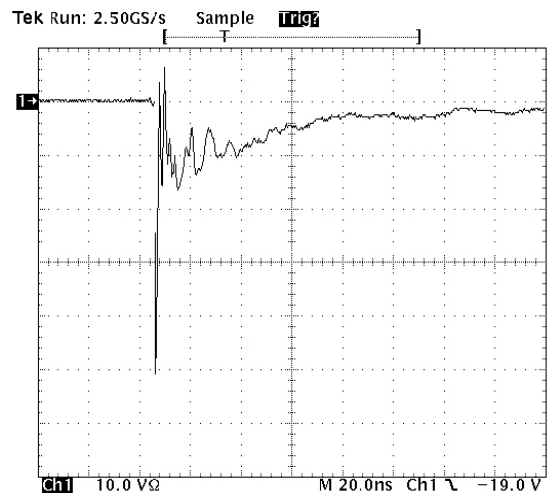
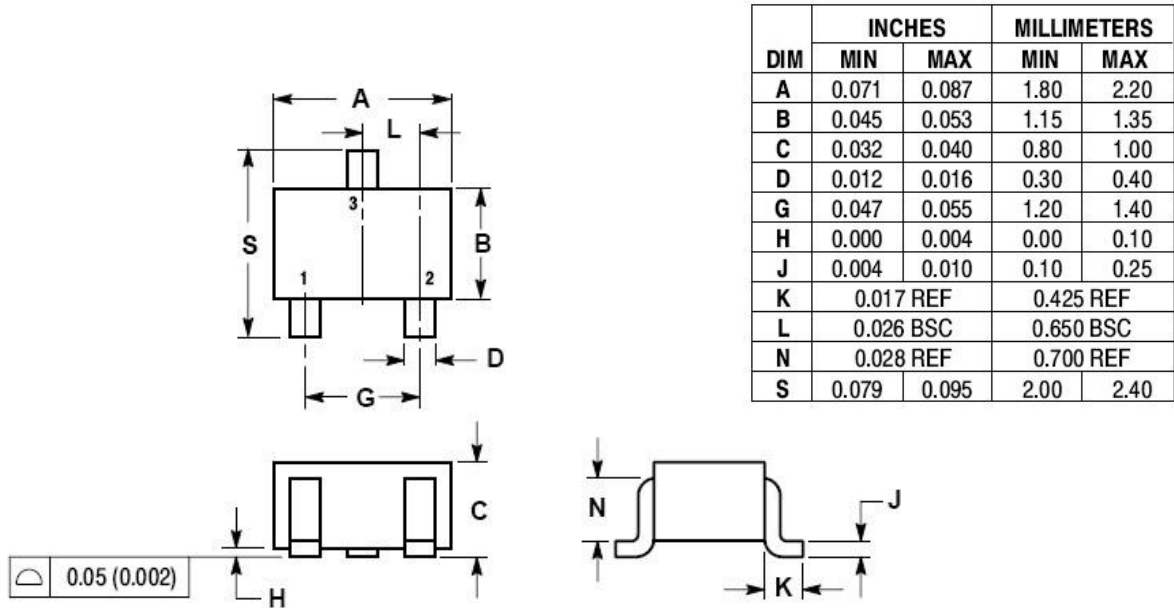


Figure 2. ESD Clamping Voltage Screenshot
Negative 8 kV Contact per IEC61000-4-2

PACKAGE OUTLINE & DIMENSIONS

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* SOLDERING FOOTPRINT

