

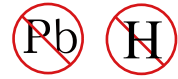


SEMICONDUCTOR

## DATA SHEET

YSESD3ZxxBT1G Series

### BIDIRECTIONAL TVS DIODES



#### APPLICATIONS

- ◆ Cell Phone Handsets and Accessories
- ◆ Microprocessor based equipment
- ◆ Personal Digital Assistants (PDA's)
- ◆ Notebooks, Desktops, and Servers
- ◆ Portable Instrumentation
- ◆ Peripherals
- ◆ Pagers

#### IEC COMPATIBILITY

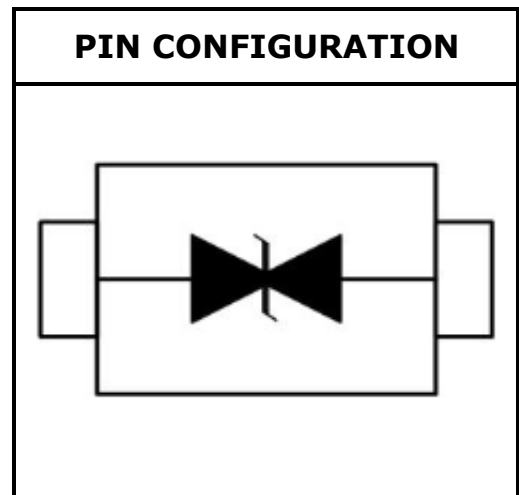
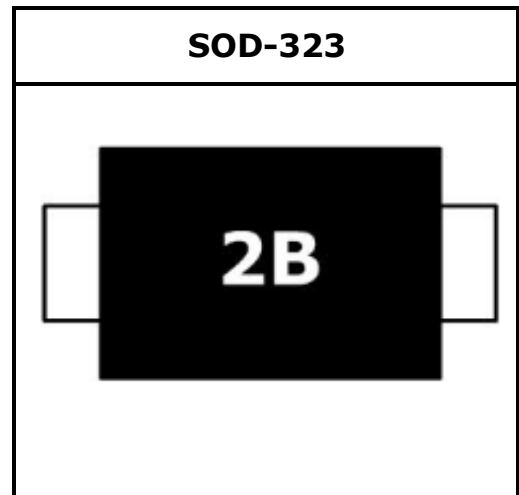
- ◆ IEC61000-4-2 (ESD)  $\pm 15\text{kV}$  (air),  $\pm 8\text{kV}$  (contact)
- ◆ IEC61000-4-4 (EFT) 40A (5/50  $\eta$  s)
- ◆ IEC61000-4-5 (Lightning) 24A (8/20 $\mu$ s)

#### FEATURES

- ◆ 350 Watts Peak Pulse Power per Line ( $t_p=8/20\mu$ s)
- ◆ Protects one I/O or power line
- ◆ Low clamping voltage
- ◆ Working voltages: 3.3V ~ 36V
- ◆ Low leakage current

#### MECHANICAL CHARACTERISTICS

- ◆ SOD-323 Package
- ◆ Molding Compound Flammability Rating : UL 94V-0
- ◆ Weight 5 Milligrams (Approximate)
- ◆ Quantity Per Reel : 3,000pcs
- ◆ Reel Size : 7 inch
- ◆ Lead Finish : Lead Free



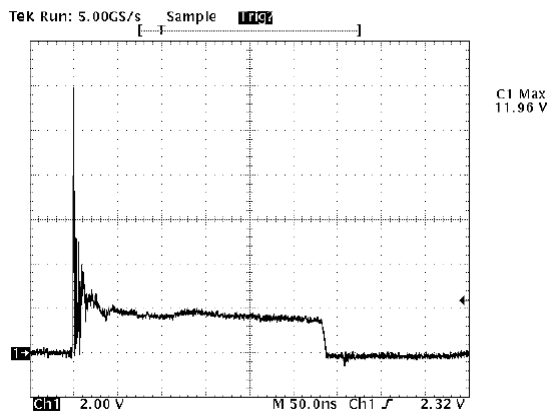
# DEVICE CHARACTERISTICS

## YSESD3ZxxBT1G Series

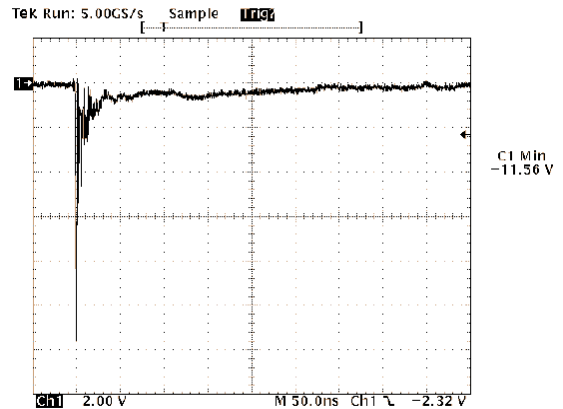
MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20μs waveform)	P <sub>PP</sub>	350	Watts
Lead Soldering Temperature	T <sub>L</sub>	260 (10 sec.)	°C
Operating Temperature Range	T <sub>J</sub>	-55 ~ 150	°C
Storage Temperature Range	T <sub>STG</sub>	-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) (max.)
YSESD3Z3.3BT1G	2A	3.3	4	1	7	10.5	20	40	450
YSESD3Z05BT1G	2B	5	6	1	9.8	18	17	10	200
YSESD3Z08BT1G	2C	8	8.5	1	13.4	24	12	1	100
YSESD3Z12BT1G	2D	12	13.3	1	19	32	11	1	75
YSESD3Z15BT1G	2J	15	16.7	1	24	38	10	1	68
YSESD3Z18BT1G	2K	18	20	1	29	45	9	1	57
YSESD3Z24BT1G	2H	24	26.7	1	43	52	7	1	50
YSESD3Z36BT1G	2N	36	40	1	60	75	5	1	40

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

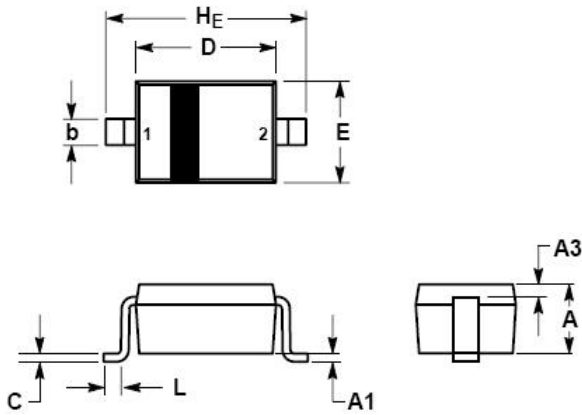


ESD Clamping  
(-8kV Contact per IEC 61000-4-2)



# PACKAGE OUTLINE & DIMENSIONS

## YSESD3ZxxBT1G Series



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.031	0.035	0.040
A1	0.00	0.05	0.10	0.000	0.002	0.004
A3	0.15 REF			0.006 REF		
b	0.25	0.32	0.4	0.010	0.012	0.016
C	0.089	0.12	0.177	0.003	0.005	0.007
D	1.60	1.70	1.80	0.062	0.066	0.070
E	1.15	1.25	1.35	0.045	0.049	0.053
L	0.08			0.003		
HE	2.30	2.50	2.70	0.090	0.098	0.105

### \* SOLDERING FOOTPRINT

