



# Low Capacitance TVS Diode Array



## APPLICATIONS

- ◆ Ethernet - 10/100/1000 Base T
- ◆ Cellular Phones
- ◆ I<sup>2</sup>C Bus Protection
- ◆ Parallel & Serial Port Protection
- ◆ Personal Digital Assistant (PDA)
- ◆ Microcontroller Input Protection
- ◆ ISDN S/T Interface
- ◆ WAN/LAN Equipment

## IEC COMPATIBILITY

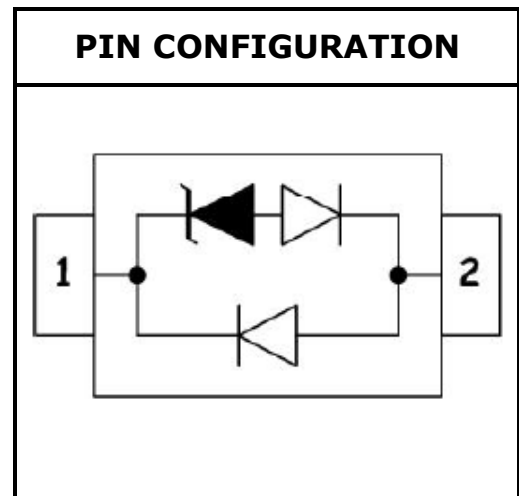
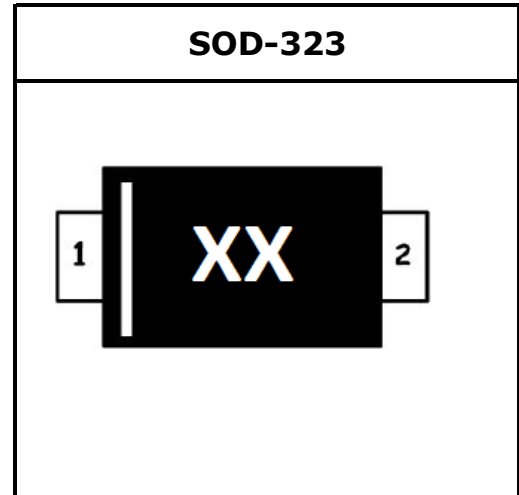
- ◆ IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
- ◆ IEC61000-4-4 (EFT) 40A (5/50ns)
- ◆ IEC61000-4-5 (Lightning) 12A (8/20 $\mu$ s)

## FEATURES

- ◆ 350 Watts Peak Pulse Power per Line ( $t_p=8/20\mu$ s)
- ◆ Protects One Uidirectional I/O line
- ◆ Low clamping voltage
- ◆ Working voltages : 5V, 12V
- ◆ Low leakage current

## MECHANICAL CHARACTERISTICS

- ◆ JEDEC SOD-323 Package
- ◆ Molding Compound Flammability Rating : UL 94V-0
- ◆ Weight 5.0 Millgrams (Approximate)
- ◆ Quantity Per Reel : 3,000pcs
- ◆ Reel Size : 7 inch
- ◆ Lead Finish : Lead Free



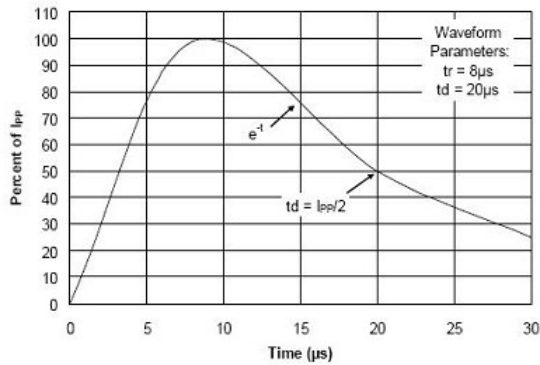
# DEVICE CHARACTERISTICS

## YSBLCxx

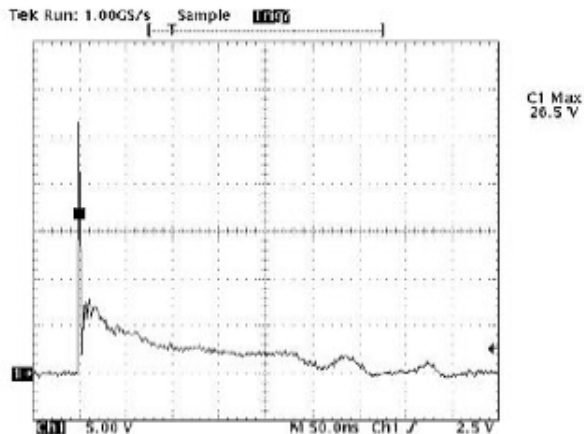
MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20µs waveform)	P <sub>PP</sub>	350	Watts
Lead Soldering Temperature	T <sub>L</sub>	260 (10 sec.)	°C
Operating Temperature Range	T <sub>J</sub>	-55 ~ 150	°C
Storage Temperature Range	T <sub>STG</sub>	-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) (typ.)
YSBLC05	S5	5.0	6.0	1	9.8	18.3	8	5	0.4
YSBLC12	SA	12.0	13.3	1	19.0	28.6	6	1	0.4

**Pulse Waveform**

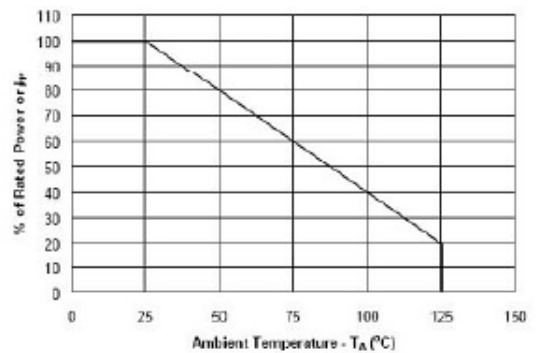


**ESD Response (8kV Contact per IEC 61000-4-2)**



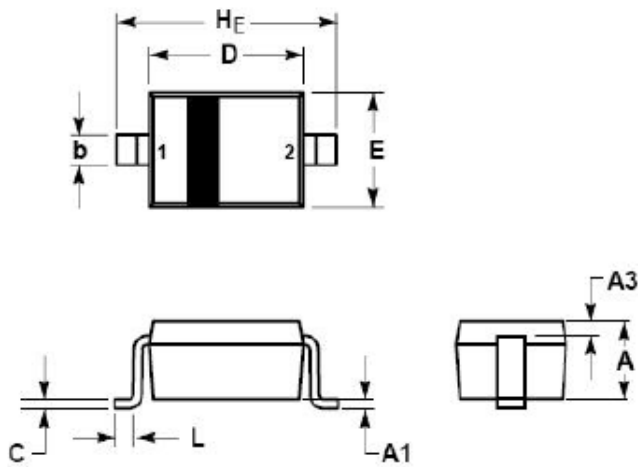
Note: Data is taken with a 10x attenuator

**Power Derating Curve**



# PACKAGE OUTLINE & DIMENSIONS

YSBLCxx



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

