

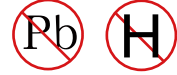


DATA SHEET

SEMICONDUCTOR

YSESDAxx02P3

LOW CAPACITANCE TVS DIODE ARRAY



APPLICATIONS

- ◆ Cellular Handsets and Accessories
- ◆ High Speed I/O Lines
- ◆ Notebooks & Handhelds
- ◆ Peripherals
- ◆ Personal Digital Assistants (PDA)
- ◆ Servers, Notebook, and Desktop PC

IEC COMPATIBILITY

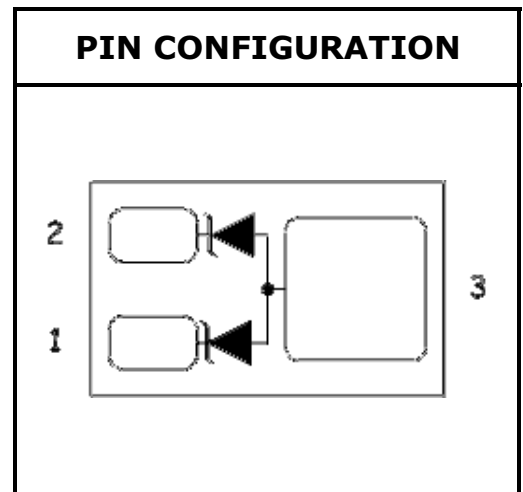
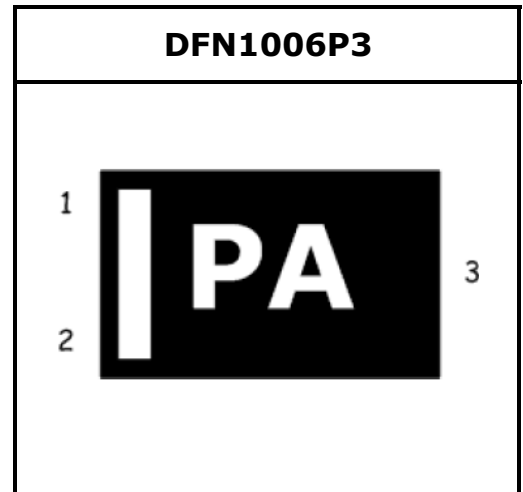
- ◆ IEC61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
- ◆ IEC61000-4-4 (EFT) 40A (5/50 η s)

FEATURES

- ◆ 20 Watts Peak Pulse Power per Line ($t_p=8/20\mu\text{s}$)
- ◆ Protects Two I/O Lines (Unidirection)
- ◆ Low Clamping Voltage
- ◆ Working Voltages : 3.3V, 5V, 12V
- ◆ Low Leakage Current

MECHANICAL CHARACTERISTICS

- ◆ DFN1006P3 (1.0x0.6mm) Package
- ◆ Molding Compound Flammability Rating : UL 94V-0
- ◆ Weight 0.6 Milligrams (Approximate)
- ◆ Quantity Per Reel : 5,000pcs
- ◆ 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}	20	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) (typ.)
YSESDA3302P3	PA	3.3	4.5	1	8.5	12	2	1	9
YSESDA0502P3	PB	5	6	1	1	15	2	1	8
YSESDA1202P3	PC	12	13.3	1	17	19	2	1	6

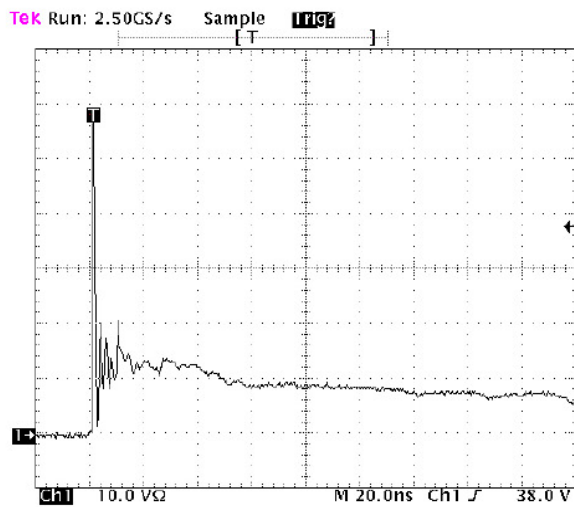


Figure 1. ESD Clamping Voltage Screenshot
Positive 8 kV contact per IEC 61000-4-2

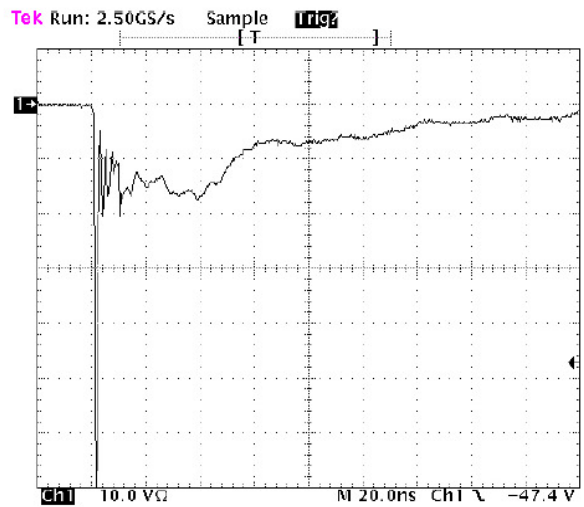
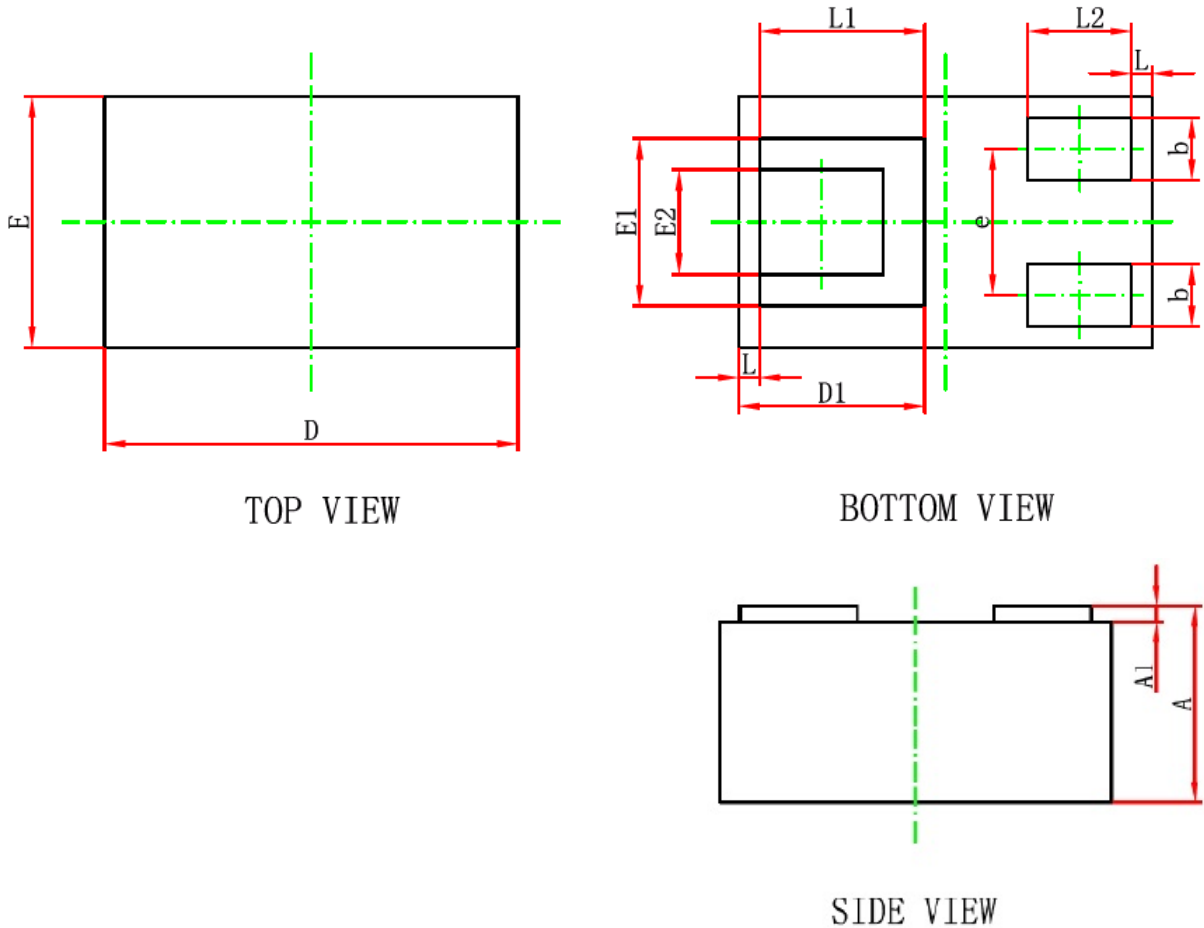


Figure 2. ESD Clamping Voltage Screenshot
Negative 8 kV contact per IEC 61000-4-2

PACKAGE OUTLINE AND DIMENSIONS

YSESDAxx02P3

DFN1006P3 PACKAGE OUTLINE AND DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.350/0.450	0.450/0.550	0.014/0.018	0.018/0.022
A1	0.010	0.090	0.000	0.004
D	0.950	1.050	0.037	0.041
E	0.550	0.650	0.022	0.026
D1	0.450 REF.		0.017 REF.	
E1	0.400 REF.		0.016 REF.	
E2	0.200	0.300	0.008	0.012
b	0.100	0.200	0.004	0.008
e	0.300	0.400	0.012	0.016
L	0.000	0.050	0.000	0.002
L1	0.250	0.350	0.010	0.014
L2	0.200	0.300	0.008	0.012