

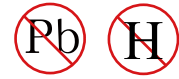


DATA SHEET

SEMICONDUCTOR

YSDAxx11CDN

BIDIRECTIONAL TVS DIODE



APPLICATIONS

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

IEC COMPATIBILITY

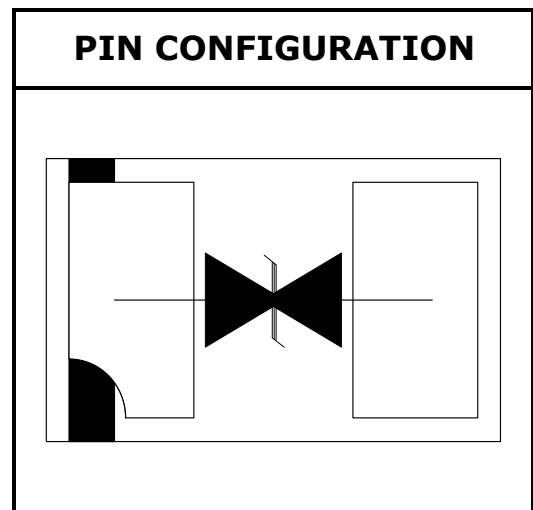
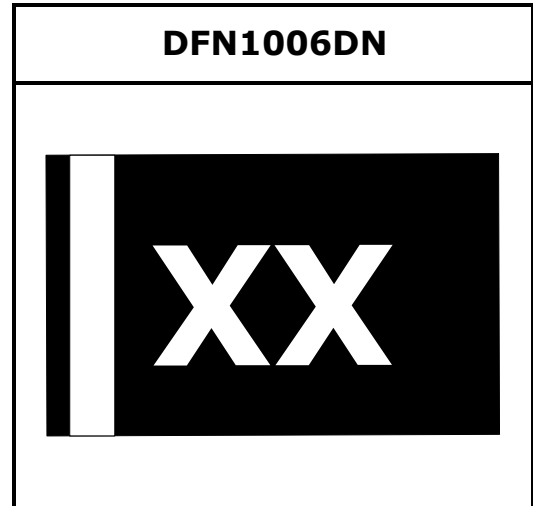
- ◆ IEC61000-4-2 (ESD) ±30kV (air), ±30kV (contact) : 3.3V ~ 15V
- ◆ IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact) : 18V ~ 36V
- ◆ IEC61000-4-4 (EFT) 40A (5/50 η s)

FEATURES

- ◆ 200 Watts Peak Pulse Power per Line (tp=8/20μs)
- ◆ Protects One Bidirectional I/O Line
- ◆ Low clamping voltage
- ◆ Working voltages : 3.3V ~ 36V
- ◆ Low leakage current

MECHANICAL CHARACTERISTICS

- ◆ DFN1006DN (1.0x0.6x0.5mm) Package
- ◆ Molding Compound Flammability Rating : UL 94V-0
- ◆ Weight 0.5 Milligrams (Approximate)
- ◆ Quantity Per Reel : 10,000pcs
- ◆ Reel Size : 7 inch
- ◆ Lead Finish : Lead Free



DEVICE CHARACTERISTICS

YSDAxx11CDN

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 (V)	(max.)	(@A)	(µA) (max.)	(pF) (typ.)
YSDA3311CDN	D3	3.3	3.5	1	5	12	15	1	20
YSDA0511CDN	D5	5	6	1	9.5	18	14	1	60
YSDA0811CDN	D8	8	8.5	1	12	22	10	1	45
YSDA1211CDN	DD	12	13.3	1	19	30	7	1	27
YSDA1511CDN	DE	15	16.7	1	25	37	6	1	25
YSDA1811CDN	DF	18	19.5	1	35	47	4	1	45
YSDA2411CDN	DH	24	26.7	1	40	55	3	1	24
YSDA3611CDN	DN	36	40	1	60	75	2	1	20

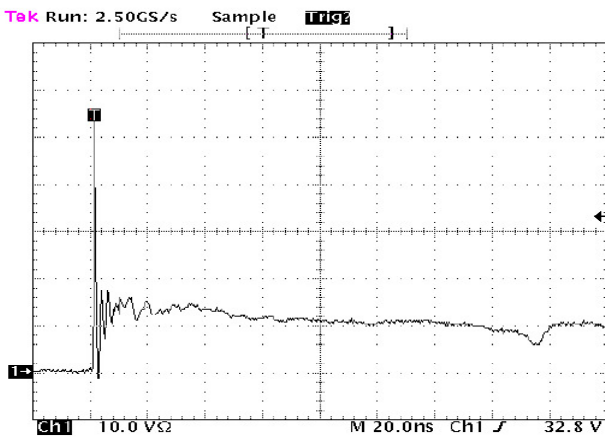


Figure 1. ESD Clamping Voltage Screenshot
Positive 8 kV Contact per IEC61000-4-2

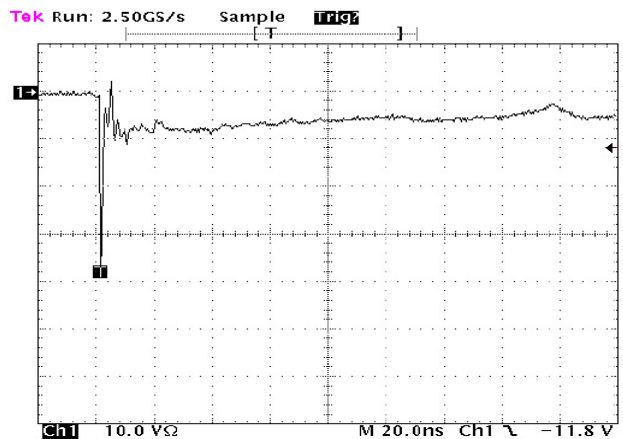
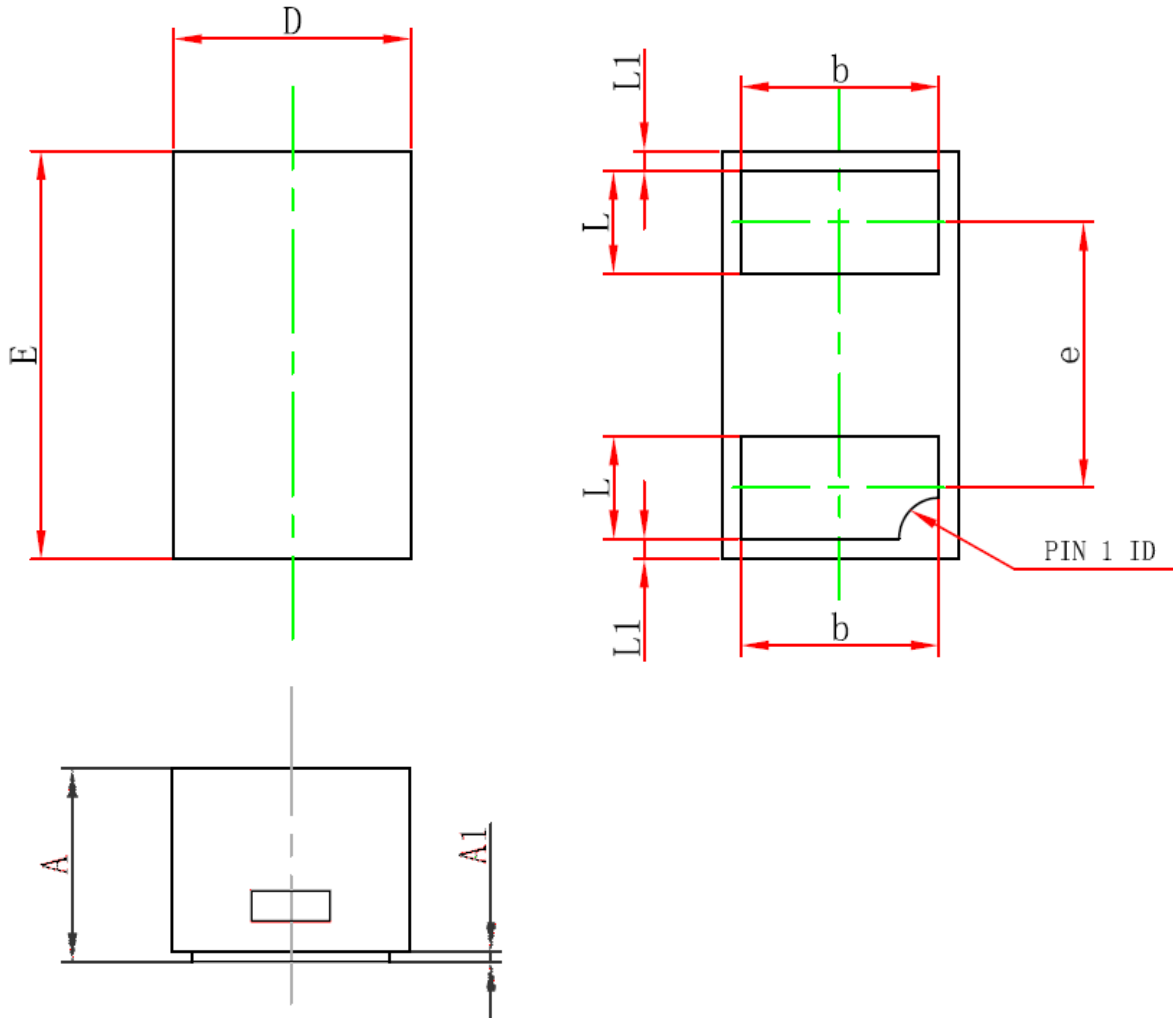


Figure 2. ESD Clamping Voltage Screenshot
Negative 8 kV Contact per IEC61000-4-2

PACKAGE OUTLINE & DIMENSIONS

YSDAxx11CDN

DFN1006DN



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.400	0.500	0.016	0.020
A1	0.000	0.050	0.000	0.002
D	0.550	0.650	0.022	0.026
E	0.950	1.050	0.037	0.041
b	0.400	0.600	0.016	0.024
e	0.650TYP.		0.026TYP.	
L	0.150	0.350	0.006	0.014
L1	0.050REF.		0.002REF.	