

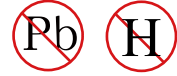


SEMICONDUCTOR

DATA SHEET

YSUM3311P

LOW VOLTAGE BIDIRECTIONAL TVS DIODE AND LATCH-UP PROTECTION



APPLICATIONS

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

IEC COMPATIBILITY

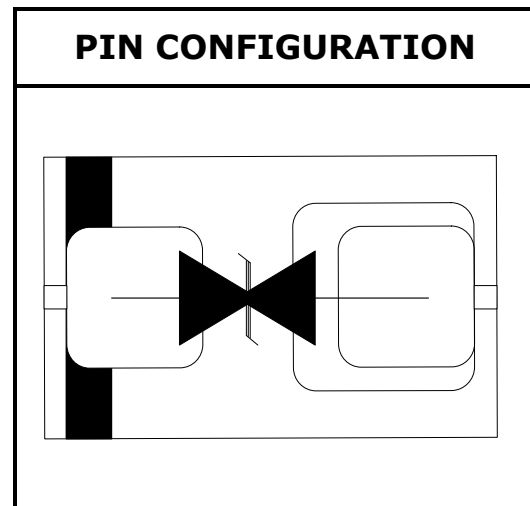
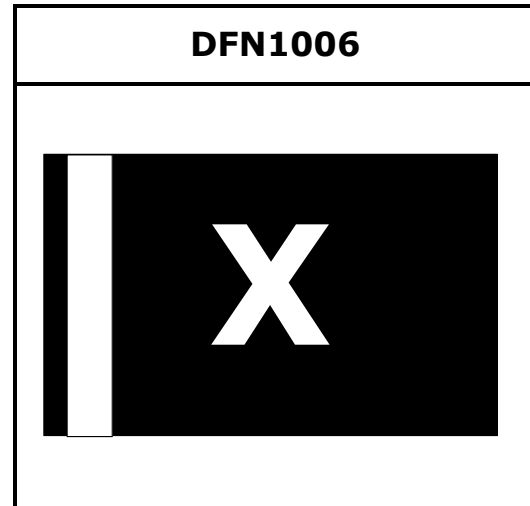
- ◆ IEC61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
- ◆ IEC61000-4-4 (EFT) 40A (5/50 η s)

FEATURES

- ◆ 90 Watts Peak Pulse Power per Line ($t_p=8/20\mu\text{s}$)
- ◆ Protects one bi-directional I/O line
- ◆ Low clamping voltage
- ◆ Working voltages : 3.3V
- ◆ Low leakage current

MECHANICAL CHARACTERISTICS

- ◆ DFN1006 (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



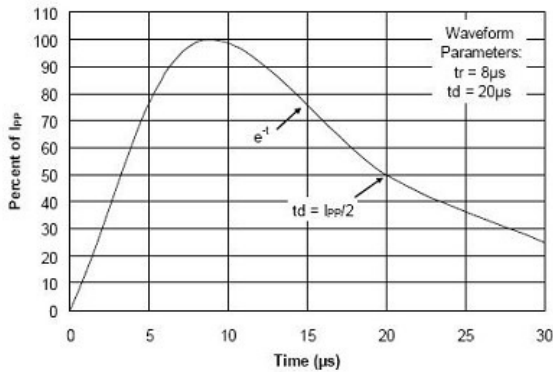
DEVICE CHARACTERISTICS

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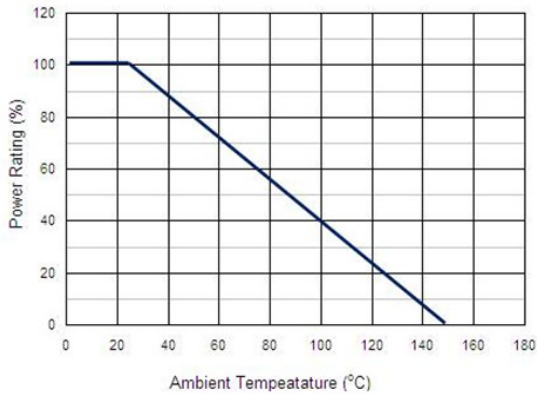
MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20µs waveform)	P _{PP}	90	Watts
Lead Soldering Temperature	T _L	260 (10 sec.)	°C
Operating Temperature Range	T _J	-55 ~ 150	°C
Storage Temperature Range	T _{STG}	-55 ~ 150	°C

ELECTRICAL CHARACTERISTICS PER LINE (@ 25°C Unless Otherwise Specified)									
PART NUMBER	DEVICE MARKING	V _{RWM}	V _B		I _T	V _C		I _R	C _T
		(V) (max.)	(min.)	(max.)	(mA)	(max.)	(@A)	(µA) (max.)	(pF) (typ.)
YSUM3311P	T	3.3	3.5	5.3	1	12	7	0.5	7

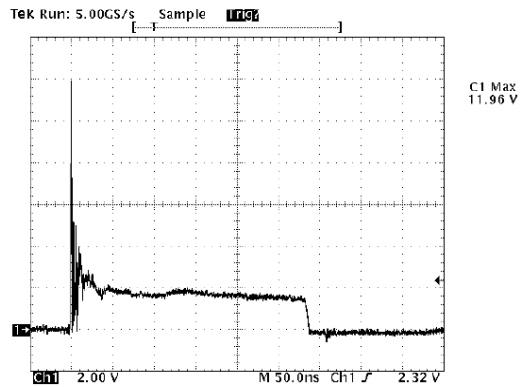
Pulse Waveform



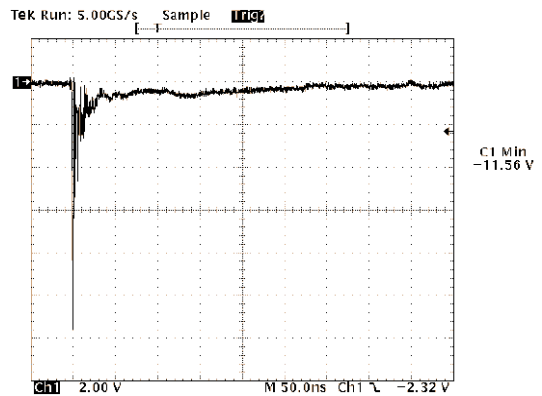
Admissible Power Dissipation Curve



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



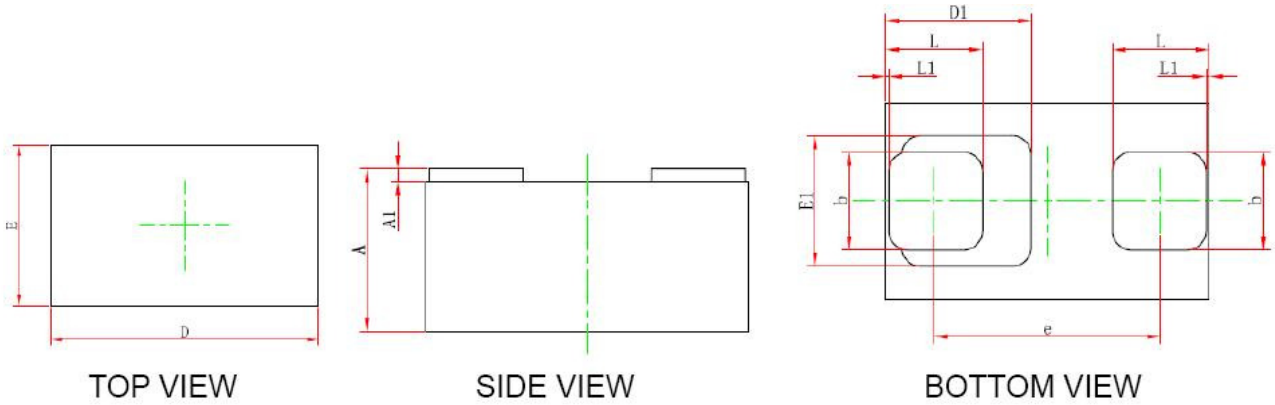
**ESD Clamping
(-8kV Contact per IEC 61000-4-2)**



PACKAGE OUTLINE & DIMENSIONS

YSUM3311P

DNF1006



PACKAGE DIMENSIONS

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.450	0.550	0.018	0.022
A1	0.010	0.070	0.000	0.003
D	0.950	1.050	0.037	0.041
E	0.550	0.650	0.022	0.026
D1	0.450REF.		0.018REF.	
E1	0.400REF.		0.016REF.	
b	0.275	0.325	0.011	0.013
e	0.675	0.725	0.027	0.029
L	0.275	0.325	0.011	0.013
L1	0.010REF.		0.000REF.	

* SOLDERING FOOTPRINT

