

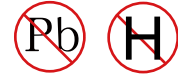


DATA SHEET

SEMICONDUCTOR

YSMSxx(C) Series

TVS/ESD DIODE ARRAY AND LATCH-UP PROTECTION



APPLICATIONS

- ◆ RS-232, RS-422 & RS-423 Data Lines
- ◆ Audio/Video Inputs
- ◆ Wireless Network Systems
- ◆ Digit Video Interface (DVI)
- ◆ Medical Sensors
- ◆ Notebook Computers

IEC COMPATIBILITY

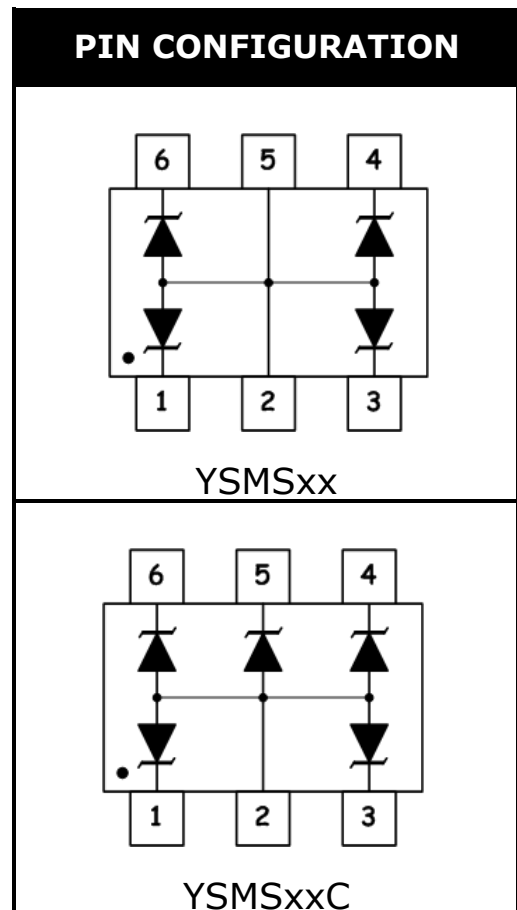
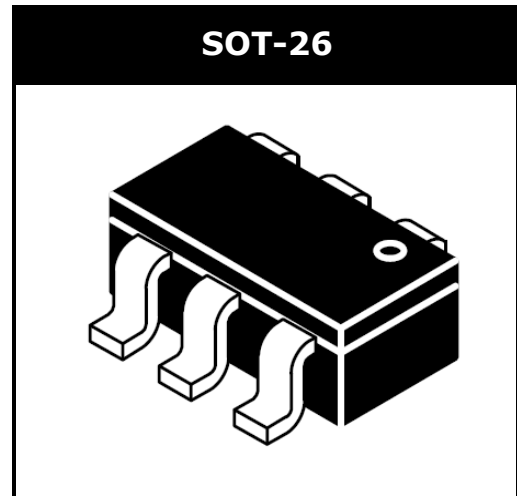
- ◆ IEC61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
- ◆ IEC61000-4-4 (EFT) 40A (5/50 η s)
- ◆ IEC61000-4-5 (Lightning) 12A (8/20 μ s)

FEATURES

- ◆ 350 Watts Peak Pulse Power per Line (tp=8/20 μ s)
- ◆ Protects four or five directional I/O lines
- ◆ Low clamping voltage
- ◆ Working voltages : 3.3V, 5V, 12V, 15V and 24V
- ◆ Low leakage current

MECHANICAL CHARACTERISTICS

- ◆ SOT-26 Package
- ◆ Molding Compound Flammability Rating : UL 94V-0
- ◆ Weight 14 Milligrams (Approximate)
- ◆ Quantity Per Reel : 3,000pcs
- ◆ Reel Size : 7 inch
- ◆ Lead Finish : Lead Free



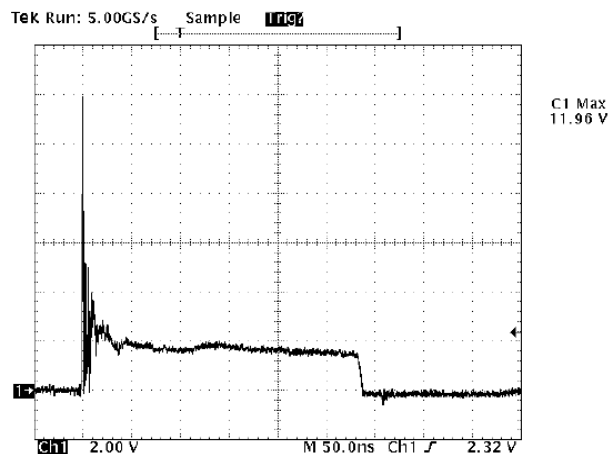
DEVICE CHARACTERISTICS

YSMSxx(C) Series

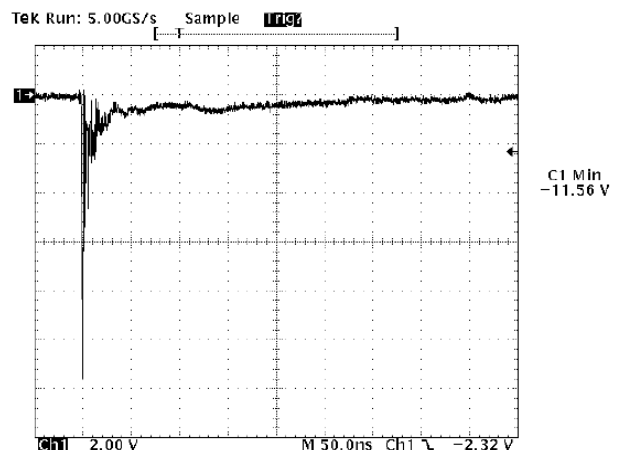
MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20µs waveform)	P _{PP}	350	Watts
Lead Soldering Temperature	T _L	260 (10 sec.)	°C
Operating Temperature Range	T _J	-55 ~ 150	°C
Storage Temperature Range	T _{STG}	-55 ~ 150	°C

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)	@5A (max.)	(max.)	(@A)	(µA) (max.)	(pF) (max.)
YSMS3.3 YSMS3.3C	TU3 TC3	3.3	4.5	1	7.5	14.0	25	5	250
YSMS05 YSMS05C	TUA TC5	5.0	6.0	1	9.8	15.0	24	5	200
YSMS12 YSMS12C	TUB TCH	12.0	13.3	1	19.0	27.0	15	1	90
YSMS15 YSMS15C	TUC TCJ	15.0	16.7	1	24.0	30.0	12	1	70
YSMS24 YSMS24C	TUD TCK	24.0	26.7	1	38.0	46.0	8	1	50

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

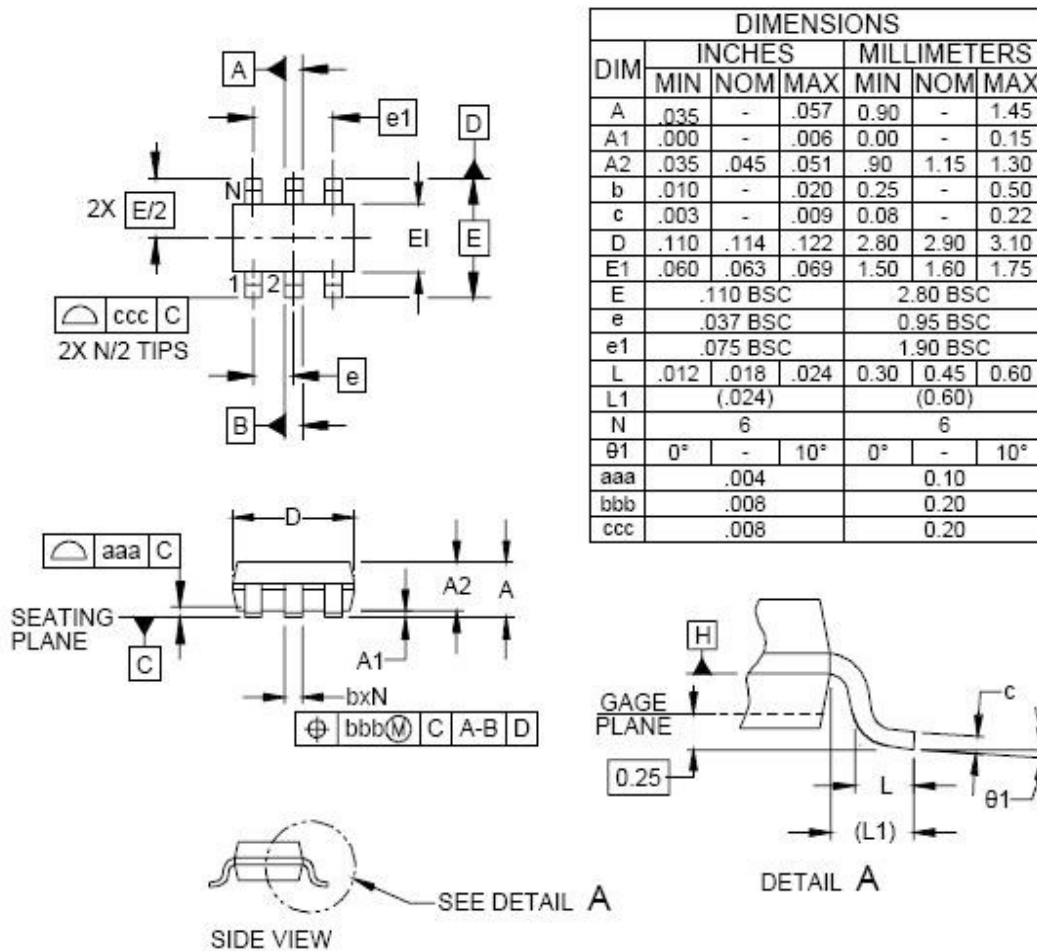


ESD Clamping
(-8kV Contact per IEC 61000-4-2)



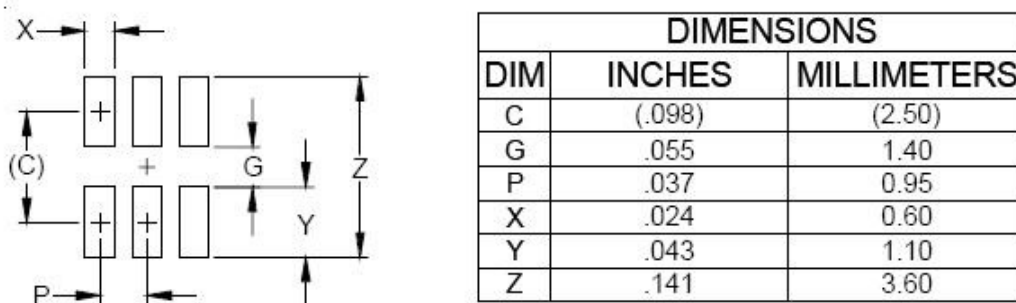
PACKAGE OUTLINE & DIMENSIONS

YSMSxx(C) Series



DIM	INCHES			MILLIMETERS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	.035	-	.057	0.90	-	1.45
A1	.000	-	.006	0.00	-	0.15
A2	.035	.045	.051	.90	1.15	1.30
b	.010	-	.020	0.25	-	0.50
c	.003	-	.009	0.08	-	0.22
D	.110	.114	.122	2.80	2.90	3.10
E1	.060	.063	.069	1.50	1.60	1.75
E	.110 BSC			2.80 BSC		
e	.037 BSC			0.95 BSC		
e1	.075 BSC			1.90 BSC		
L	.012	.018	.024	0.30	0.45	0.60
L1	(.024)			(0.60)		
N	6			6		
$\theta 1$	0°	-	10°	0°	-	10°
aaa	.004			0.10		
bbb	.008			0.20		
ccc	.008			0.20		

* SOLDERING FOOTPRINT



DIM	DIMENSIONS	
	INCHES	MILLIMETERS
C	(.098)	(2.50)
G	.055	1.40
P	.037	0.95
X	.024	0.60
Y	.043	1.10
Z	.141	3.60