



# DATA SHEET

SEMICONDUCTOR

YSMDAxxC-7 Series

## BIDIRECTIONAL TVS ARRAY FOR PROTECTION OF SEVEN I/O LINES



### APPLICATIONS

- ◆ RS-232 and RS-422 Data Lines
- ◆ Microprocessor Based Equipment
- ◆ LAN/WAN Equipment
- ◆ Notebooks, Desktops, and Servers
- ◆ Instrumentation
- ◆ Peripherals
- ◆ Set Top Box
- ◆ Serial and Parallel Ports

### IEC COMPATIBILITY

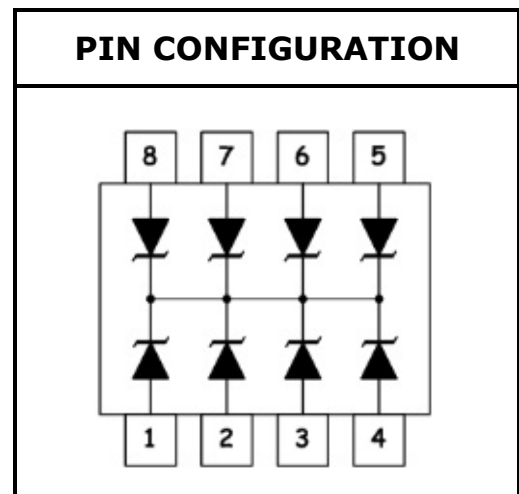
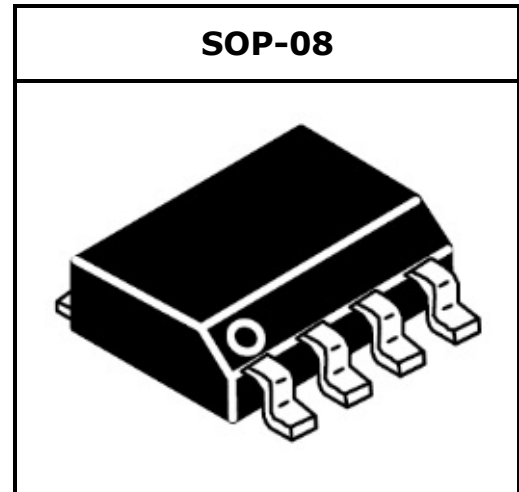
- ◆ IEC61000-4-2 (ESD)  $\pm 25\text{kV}$  (air),  $\pm 15\text{kV}$  (contact)
- ◆ IEC61000-4-4 (EFT) 40A (5/50  $\eta$  s)
- ◆ IEC61000-4-5 (Lightning) 12A (8/20 $\mu$ s)

### FEATURES

- ◆ 300 Watts Peak Pulse Power per Line ( $t_p=8/20\mu$ s)
- ◆ Protects seven bidirectional I/O lines
- ◆ Low clamping voltage
- ◆ Working voltages : 3.3V, 5V, 8V, 12V, 15V, 24V
- ◆ Low leakage current

### MECHANICAL CHARACTERISTICS

- ◆ JEDEC SOP-08 Package
- ◆ Molding Compound Flammability Rating : UL 94V-0
- ◆ Weight 70 Milligrams (Approximate)
- ◆ Quantity Per Reel : 500pcs
- ◆ Reel Size : 7 inch
- ◆ Lead Finish : Lead Free



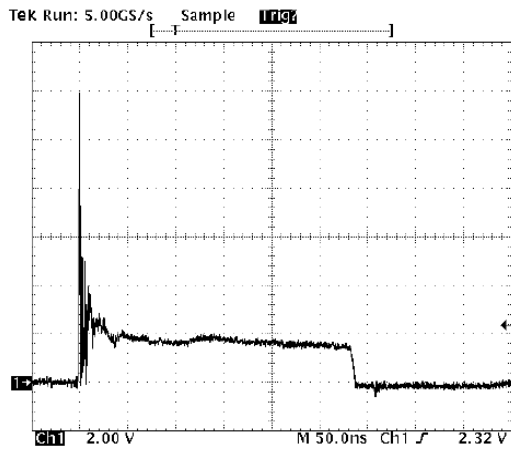
# DEVICE CHARACTERISTICS

## YSMDAxxC-7 Series

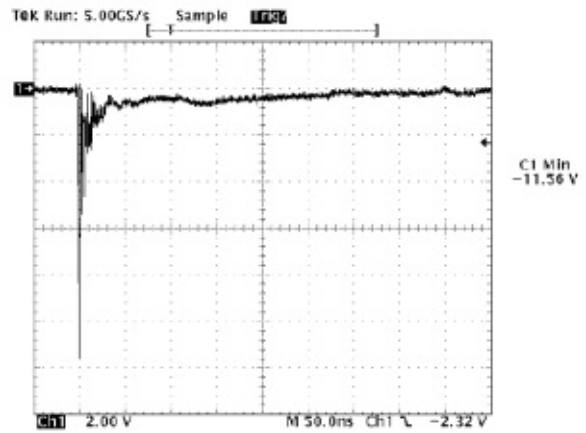
MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20µs waveform)	P <sub>PP</sub>	300	Watts
Lead Soldering Temperature	T <sub>L</sub>	260 (10 sec.)	°C
Operating Temperature Range	T <sub>J</sub>	-55 ~ 150	°C
Storage Temperature Range	T <sub>STG</sub>	-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) (Max.)
YSMDA03C-7	SMDA 03C-7	3.3	4.5	1	7.5	10.5	20	40	450
YSMDA05C-7	SMDA 05C-7	5.0	6.0	1	9.8	20	17	5	350
YSMDA08C-7	SMDA 08C-7	8.0	8.5	1	13.4	24	14	1	190
YSMDA12C-7	SMDA 12C-7	12.0	13.3	1	19	35	12	1	120
YSMDA15C-7	SMDA 15C-7	15.0	16.7	1	24	40	10	1	75
YSMDA24C-7	SMDA 24C-7	24.0	26.7	1	43	56	5	1	50

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

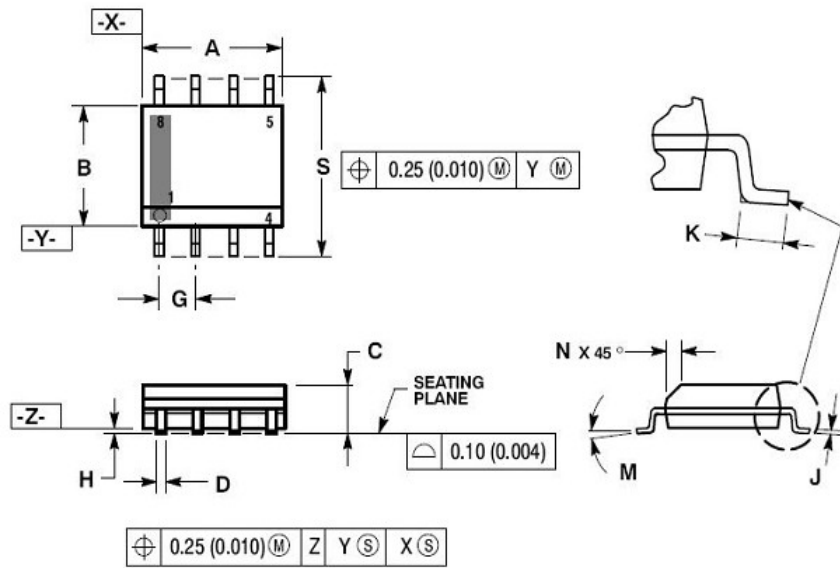


**ESD Clamping  
(-8kV Contact per IEC 61000-4-2)**



# PACKAGE OUTLINE & DIMENSIONS

## YSMDAxxC-7 Series



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	4.80	5.00	0.189	0.197
B	3.80	4.00	0.150	0.157
C	1.35	1.75	0.053	0.069
D	0.33	0.51	0.013	0.020
G	1.27 BSC		0.050 BSC	
H	0.10	0.25	0.004	0.010
J	0.19	0.25	0.007	0.010
K	0.40	1.27	0.016	0.050
M	0°	8°	0°	8°
N	0.25	0.50	0.010	0.020
S	5.80	6.20	0.228	0.244

### \* SOLDERING FOOTPRINT

