SEMICONDUCTOR

DATA SHEET

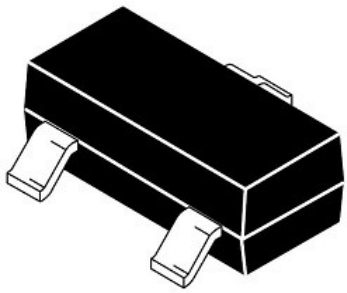
YSOTxxC

TVS DIODE ARRAY FOR LATCH-UP PROTECTION

APPLICATIONS

- Portable Electronics
- Cellular Handsets and Accessories
- Industrial Controls
- Portable instrumentation
- Set-Top Box
- Peripherals

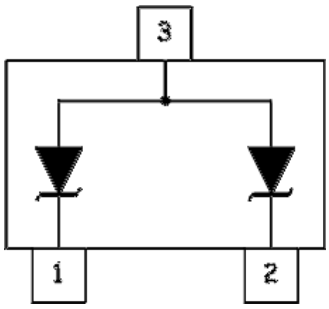
SOT-23



IEC COMPATIBILITY

- IEC61000-4-2 (ESD) ±30kV (air), ±30kV (contact) -- 3.0V~15V
- IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact) -- 24V~36V
- IEC61000-4-4 (EFT) 40A (5/50 η s)
- IEC61000-4-5 (Lightning) 5A (8/20μs)

PIN CONFIGURATION



FEATURES

- 400 Watts Peak Pulse Power per Line (tp=8/20μs)
- Protects two I/O lines
- Low clamping voltage
- Working voltages: 3.0V ~ 36V
- Low leakage current

MECHANICAL CHARACTERISTICS

- JEDEC SOT-23 Package
- Molding Compound Flammability Rating : UL 94V-O
- Weight 8 Millgrams (Approximate)
- Quantity Per Reel : 3,000pcs
- Reel Size : 7 inch
- Lead Finish : Lead Free

DEVICE CHARACTERISTICS

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MAXIMUM RATINGS (@ 25℃ Unless Otherwise Specified)			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20μs waveform)	P_{PP}	400	Watts
Lead Soldering Temperature	T_L	260 (10 sec.)	℃
Operating Temperature Range	T_J	-55 ~ 150	℃
Storage Temperature Range	T_{STG}	-55 ~ 150	℃

ELECTRICAL CHARACTERISTICS PER LINE (@ 25℃ Unless Otherwise Specified)									
PART NUMBER	DEVICE MARKING	V_{RWM} (V) (max.)	V_B (V) (min.)	I_T (mA)	V_C @1A (max.)	V_C (max.)	V_C (@A)	I_R (μA) (max.)	C_T (pF) (typ.)
YSOT03C	B03C	3.0	4.0	1	7.5	8.5	5	5	120
YSOT05C	B05C	5.0	6.0	1	9.8	9.8	5	5	110
YSOT08C	B08C	8.0	8.2	1	13.4	15.0	5	1	70
YSOT12C	B12C	12.0	13.3	1	19.0	17.0	5	1	60
YSOT15C	B15C	15.0	16.7	1	24.0	22.0	5	1	50
YSOT24C	B24C	24.0	26.7	1	43.0	32.0	3	1	25
YSOT36C	B36C	36.0	40.0	1	55.0	55.0	1	1	20

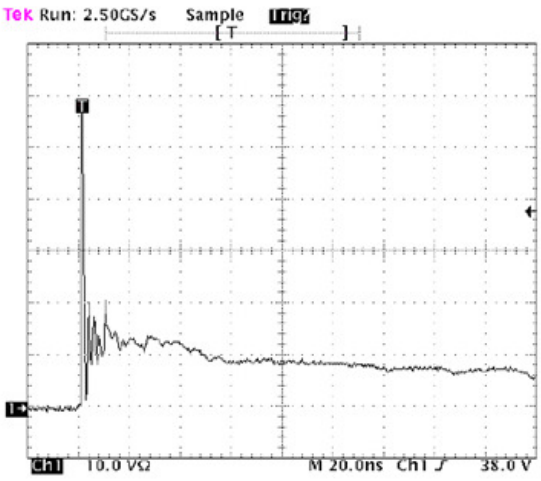


Figure 1. ESD Clamping Voltage Screenshot
Positive 8 kV contact per IEC 61000-4-2

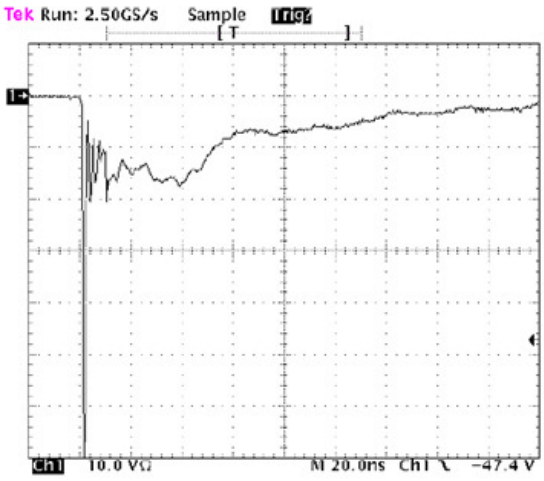
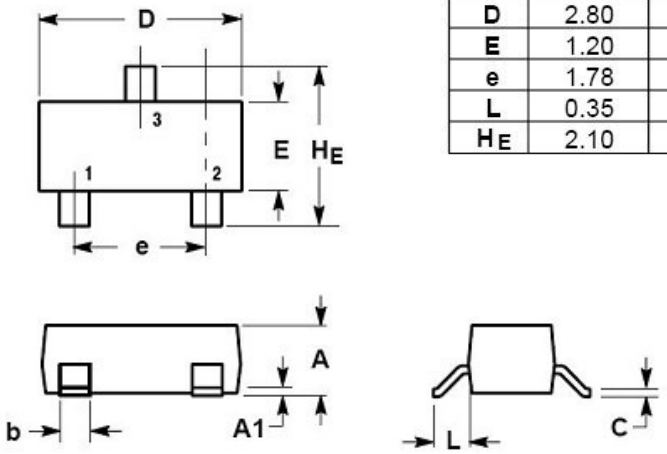


Figure 2. ESD Clamping Voltage Screenshot
Negative 8 kV contact per IEC 61000-4-2

PACKAGE OUTLINE & DIMENSIONS

YSOTxxC

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.89	1.00	1.11	0.035	0.040	0.044
A1	0.01	0.06	0.10	0.001	0.002	0.004
b	0.37	0.44	0.50	0.015	0.018	0.020
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.90	3.04	0.110	0.114	0.120
E	1.20	1.30	1.40	0.047	0.051	0.055
e	1.78	1.90	2.04	0.070	0.075	0.081
L	0.35	0.54	0.69	0.014	0.021	0.029
H_E	2.10	2.40	2.64	0.083	0.094	0.104



* SOLDERING FOOTPRINT

