SEMICONDUCTOR

DATA SHEET

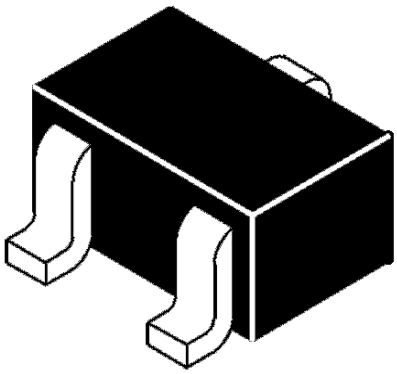
YSESDA0502CT3

BIDIRECTIONAL TVS DIODE ARRAY

APPLICATIONS

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

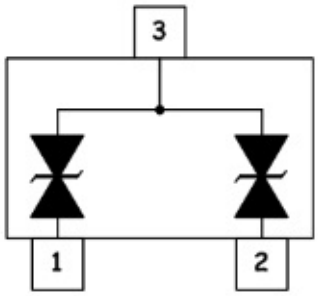
SOT-523



IEC COMPATIBILITY

- IEC61000-4-2 (ESD) ±30kV (air), ±30kV (contact)
- IEC61000-4-4 (EFT) 40A (5/50 η s)

PIN CONFIGURATION



FEATURES

- 100 Watts Peak Pulse Power per Line (tp=8/20μs)
- Protects one birectional I/O line
- Low clamping voltage
- Working voltages : 5.0V
- Low leakage current

MECHANICAL CHARACTERISTICS

- SOT-523 (1.6x1.6mm) Package
- Molding Compound Flammability Rating : UL 94V-O
- Weight 2.5 Millgrams (Approximate)
- Quantity Per Reel : 3,000pcs
- Reel Size : 7 inch
- Lead Finish : Lead Free

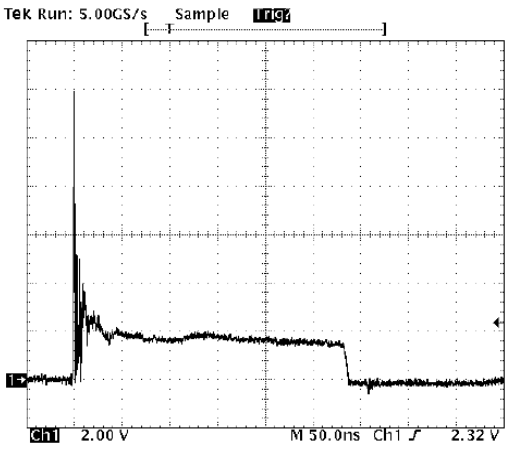
DEVICE CHARACTERISTICS

YSESDA0502CT3

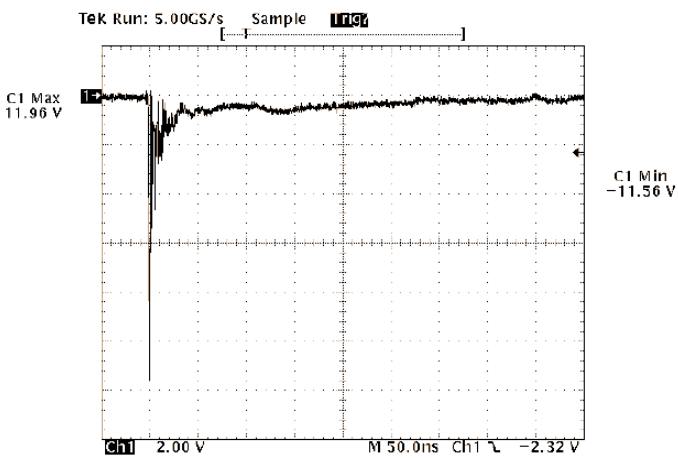
MAXIMUM RATINGS (@ 25℃ Unless Otherwise Specified)			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20μs waveform)	P_{PP}	100	Watts
Lead Soldering Temperature	T_L	260 (10 sec.)	℃
Operating Temperature Range	T_J	-55 ~ 150	℃
Storage Temperature Range	T_{STG}	-55 ~ 150	℃

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.)	(@A)	I_R (μA) (max.)	C_T (pF) (typ.)
YSESDA0502CT3	5E	5	6	1	12	25	3	1	10

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

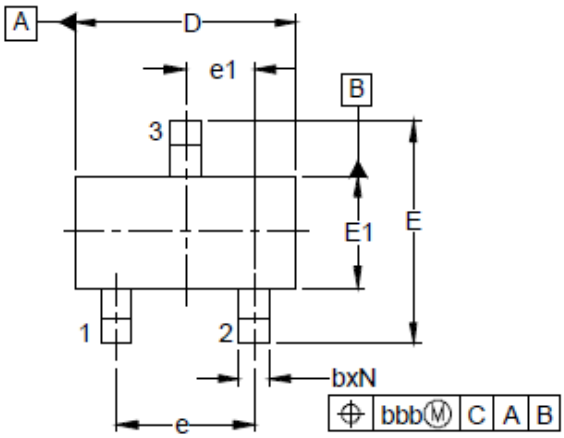


ESD Clamping
(-8kV Contact per IEC 61000-4-2)

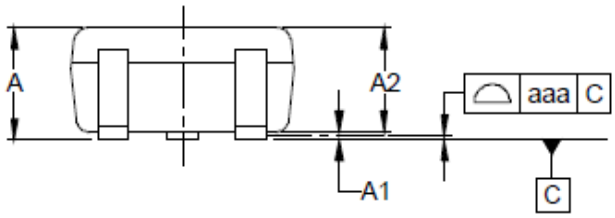


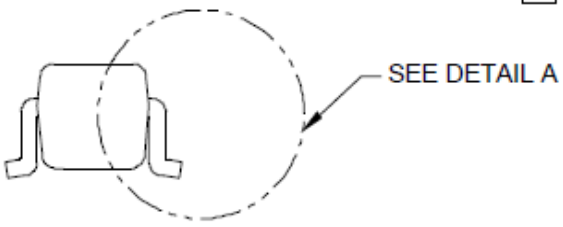
PACKAGE OUTLINE & DIMENSIONS

YSESDA0502CT3

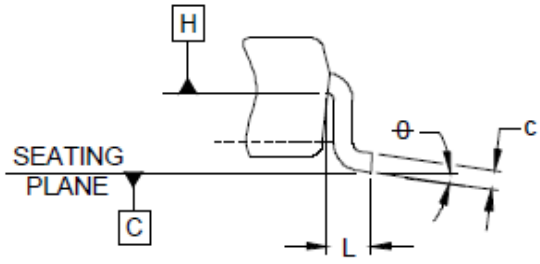


DIMENSIONS						
DIM	INCHES			MILLIMETERS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	.023	-	.035	0.60	-	0.90
A1	.000	-	.004	0.00	-	0.10
A2	.023	.030	.031	0.60	0.75	0.80
b	.005	-	.012	0.15	-	0.30
c	.003	-	.008	0.10	-	0.20
D	.059	.063	.067	1.50	1.60	1.70
E	.057	.063	.069	1.45	1.60	1.75
E1	.029	.031	.033	0.75	0.80	0.85
e	.039 BSC			1.00 BSC		
e1	.020 BSC			0.50 BSC		
L	(.009)			(0.22)		
N	3			3		
θ	0°	-	8°	0°	-	8°
aaa	.004			0.10		
bbb	.008			0.20		



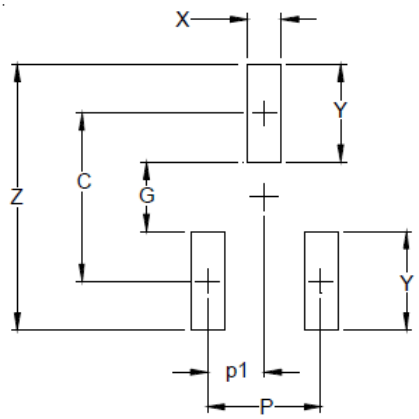


SIDE VIEW



DETAIL A

* SOLDERING FOOTPRINT



DIMENSIONS		
DIM	INCHES	MILLIMETERS
C	(.055)	(1.40)
P	.039	1.00
p1	.020	0.50
G	.024	0.60
X	.016	0.40
Y	.031	0.80
Z	.087	2.20