



APPROVAL SHEET

Customer Information

Customer :			
Part Name :			
Part No. :			
Model No. :			
COMPANY	PURCHASE	R&D	



Vendor Information

Name:	SFI ELECTRONICS TECHNOLOGY INC.
Part Name	Ultra Low Capacitance TVS Diode Array
Part No.	SED323A series
Lot No.	

SFI ELECTRONICS TECHNOLOGY INC.

ADDRESS : No.6, Lane 340, Shan-Ying Road , Guishan, Tao Yuan Taiwan

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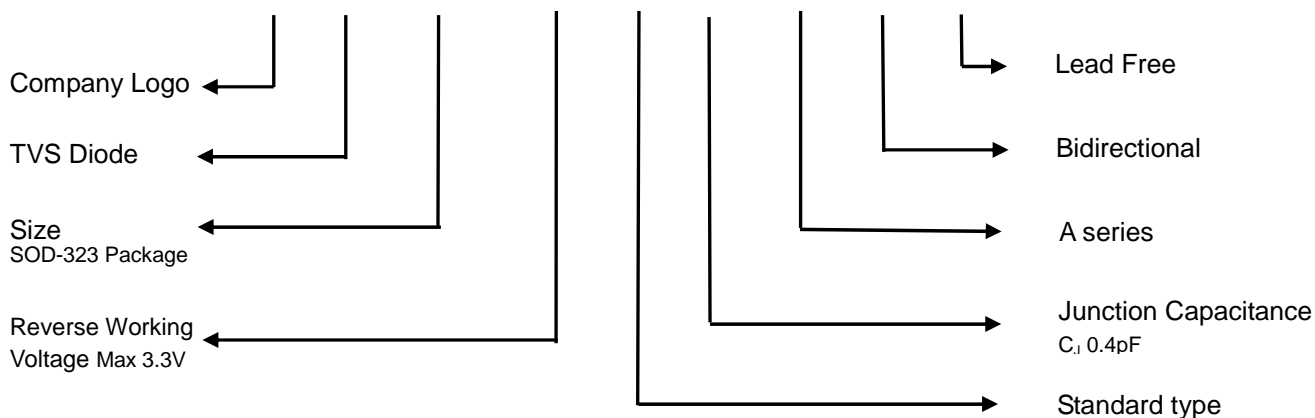
Quality Control	Document Control	Business Issue	
 ISO 9001:2000 ISO TS16949:2002 ISO 14001:2004	REV : B	Prepared	Check
			

Part No. :	SED323A series	Document No.	AS-RD323ME001-LF	REV.	B
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1. PART NUMBER IDENTIFICATION

S ED 323 – 3R30 D 0R4 – A - 11 - LF



1.1 MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
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

*:All of data is based on 25°C

1.2 ELECTRICAL CHARACTERISTICS

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.)
SED323-3R30D0R4-A-11-LF	CC	3.3	4.0	1	5.15	13.9	8	20
SED323-050D0R4-A-11-LF	AC	5.0	6.0	1	9.80	18.3	8	5
SED323-120D0R4-A-11-LF	DC	12.0	13.3	1	19.00	28.6	6	1
SED323-150D0R4-A-11-LF	EC	15.0	16.7	1	24.00	31.8	5	1
SED323-240D0R4-A-11-LF	HC	24.0	26.7	1	43.00	56.0	3	1

Note 1 : TVS devices are normally selected according to the working peak reverse voltage (V_{RWM}), which should be equal or greater than the DC or continuous peak operating voltage level.

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1.3 APPLICATIONS

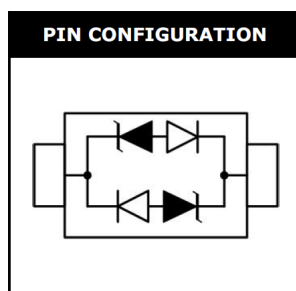
- (1) Cell Phone Handsets and Accessories
- (2) Microprocessor based equipment
- (3) Personal Digital Assistants (PDA's)
- (4) Notebooks, Desktops, and Servers
- (5) Portable Instrumentation
- (6) Peripherals
- (7) USB Interface

1.4 IEC COMPATIBILITY

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

1.5 FEATURES

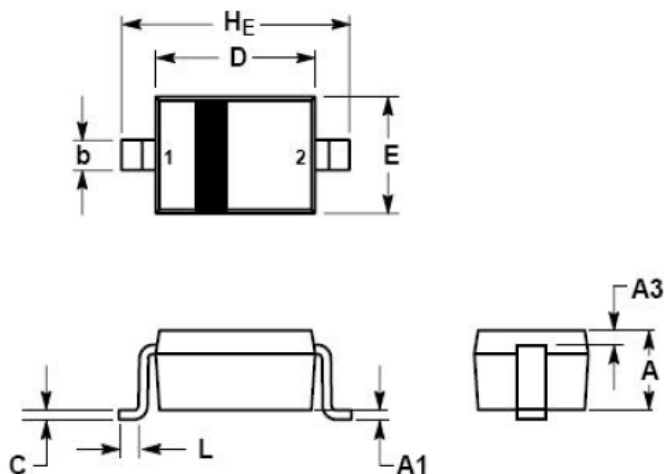
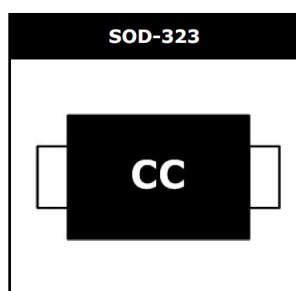
- (1) 350 Watts Peak Pulse Power per Line ($t_p=8/20 \mu\text{s}$)
- (2) Protects one I/O line (bidirectional)
- (3) Low clamping voltage
- (4) Working voltages: 3.3V, 5V, 12V, 15V, 24V
- (5) Low leakage current





2 . MECHANICAL CHARACTERISTICS

- (1) JEDEC SOD-323 Package
- (2) Molding Compound Flammability Rating : UL 94V-O
- (3) Weight 5 Milligrams (Approximate)
- (4) Quantity Per Reel : 3,000pcs
- (5) Reel Size : 7 inch
- (6) Lead Finish : Lead Free

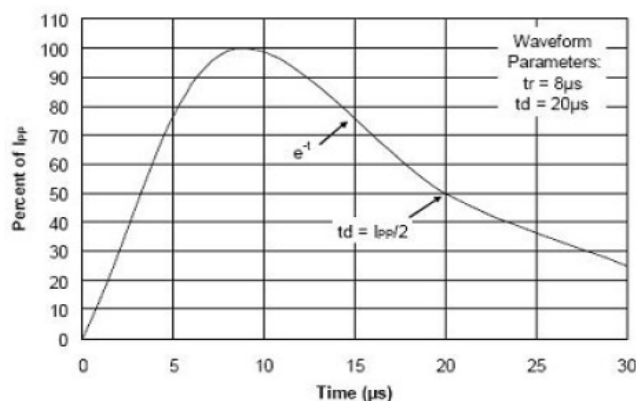


DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.031	0.035	0.040
A1	0.00	0.05	0.10	0.000	0.002	0.004
A3	0.15 REF			0.006 REF		
b	0.25	0.32	0.4	0.010	0.012	0.016
C	0.089	0.12	0.177	0.003	0.005	0.007
D	1.60	1.70	1.80	0.062	0.066	0.070
E	1.15	1.25	1.35	0.045	0.049	0.053
L	0.08			0.003		
HE	2.30	2.50	2.70	0.090	0.098	0.105

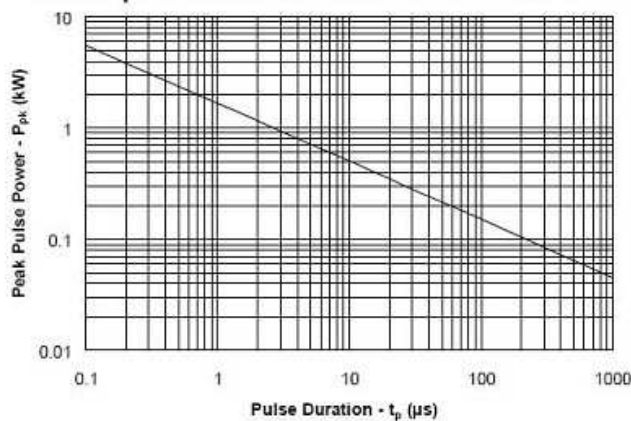


3. RATING AND CHARACTERISTIC CURVES

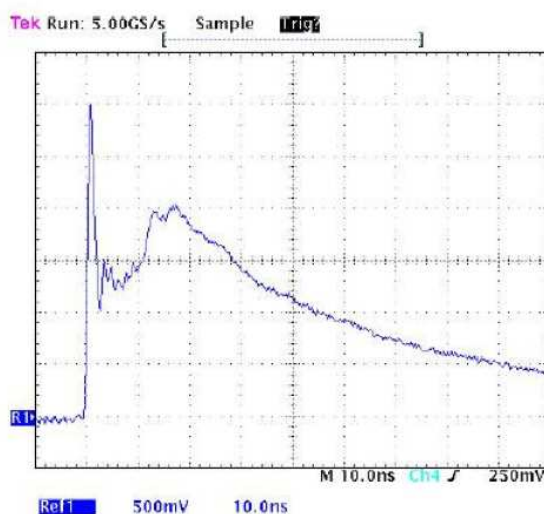
Pulse Waveform



Non-Repetitive Peak Pulse Power vs. Pulse Time



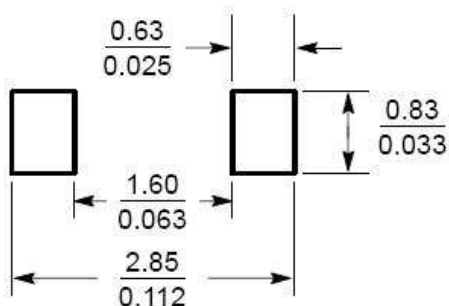
ESD Pulse Waveform (Per IEC 61000-4-2)





4. SOLDERING RECOMMENDATIONS

SOLDERING FOOTPRINT



5. STANDARD PACKAGING

Size	1005
Pcs	3000