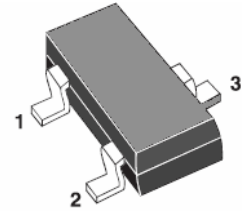




DUAL TRANSIL TVS ARRAY

Features

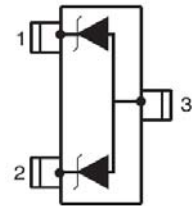
- SOT-23 Package
- 2 Unidirectional Transil functions
- Peak Power Dissipation 300W @8 x 20 us Pulse
- Low Leakage
- Fast Response Time < 1 ns
- Protects RS232 I/O Port
- ESD Protection to IEC 61000-4-2 Level 4, 15KV(Air), 8KV(Contact)
- 16KV Human Body Model ESD Requirements
- RoHS Compliant in Lead-Free Versions



SOT23

Applications

- Computers
- Printers
- Communication Systems



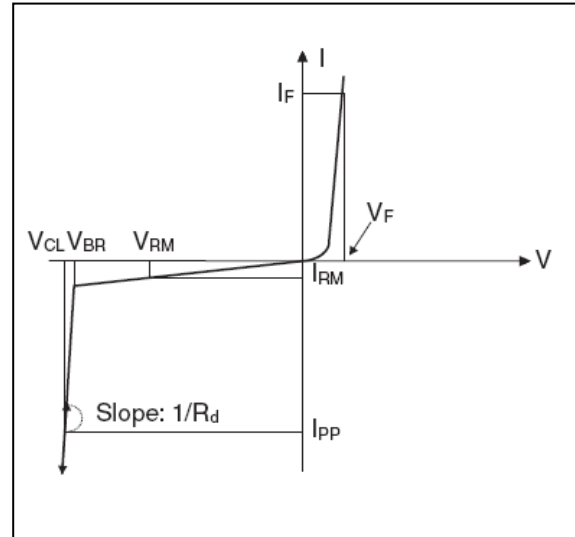
Absolute Maximum Ratings

Symbol	Parameter	Value	Units
P _{PP}	Peak Pulse Power (t _p = 8/20μs)	300	W
T _L	Maximum lead temperature for soldering during 10s	260	°C
T _{stg}	Storage Temperature Range	-55 to +15	°C
T _{op}	Operating Temperature Range	-40 to +125	°C
T _j	Maximum junction temperature	150	°C
V _{PP}	Electrostatic discharge		
	MIL STD 883C -Method 3015-6	25	kv
	IEC61000-4-2 air discharge	16	
IEC61000-4-2 contact discharge	9		

ESDAxxL SERIES

Electrical Characteristics

Symbol	Parameter
V_{RM}	Stand-off voltage
V_{BR}	Breakdown voltage
V_{CL}	Clamping voltage
I_{RM}	Leakage current
I_{PP}	Peak pulse current
αT	Voltage temperature coefficient
V_F	Forward voltage drop
C	Capacitance
R_d	Dynamic resistance



Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Part Numbers	V_{BR}		I_R	V_{RM}	I_{RM}	V_F	I_F	R_d	αT	C
	Min.	Max.				Max.		Typ. (1)	Max. (2)	Typ. 0v bias
	v	v				v		mΩ	10 ⁻⁴ /°C	pF
ESDA5V3L	5.3	5.9	1	3	2	1.25	200	280	5	220
ESDA6V1L	6.1	7.2	1	5.25	20	1.25	200	350	6	140
ESDA14V2L	14.2	15.8	1	12	5	1.25	200	650	10	90
ESDA25L	25	30	1	24	1	1.2	10	1000	10	50

1. Square pulse $I_{PP}=15A, t_p=2.5\mu s$ 2. $\Delta V_{BR}=\alpha T*(T_{amb}-25^\circ C)*V_{BR}(25^\circ C)$

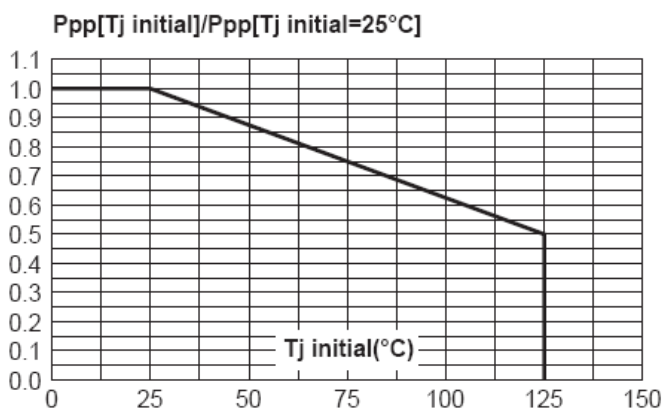


Fig1. Peak power dissipation versus Initial junction temperature

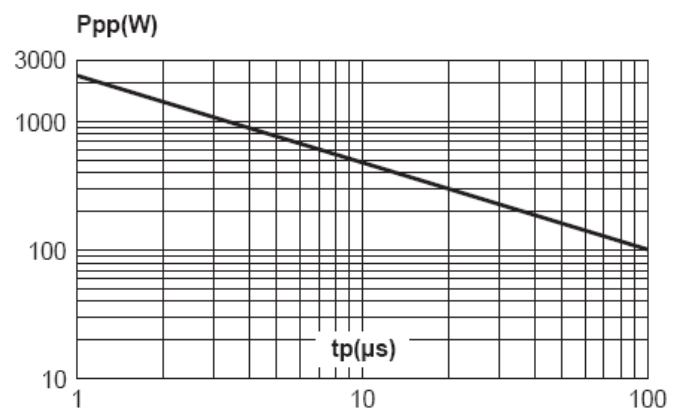


Fig2. Peak pulse power versus exponential pulse duration (T_j initial=25°C)

ESDAxxL SERIES

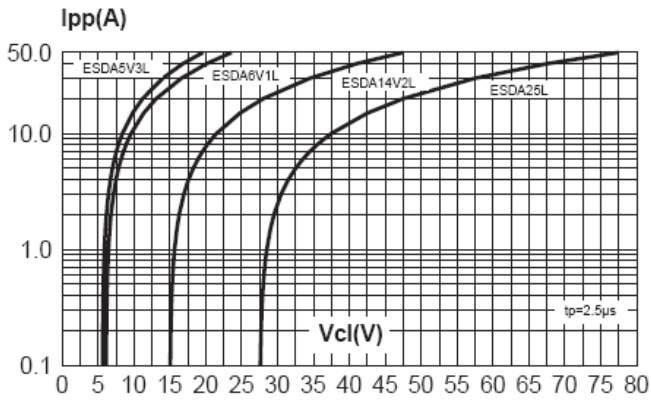


Fig3. Clamping voltage versus peak pulse current (T_j initial = 25°C, rectangular waveform, $t_p = 2.5 \mu s$)

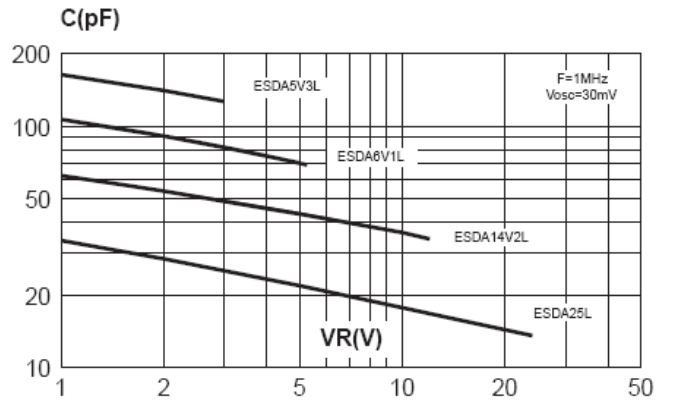


Fig4. Capacitance versus reverse Applied voltage

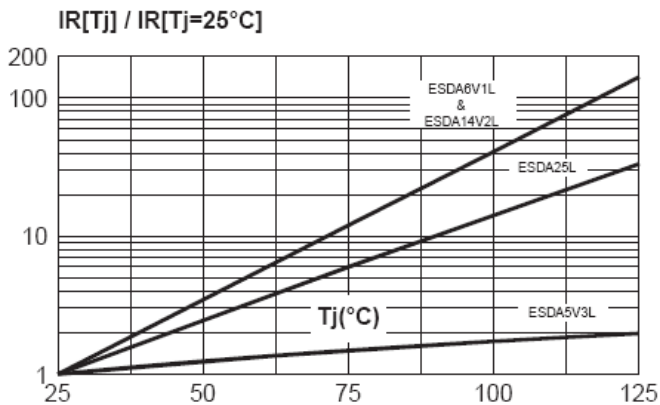


Fig5. Relative variation of leakage current Versus junction temperature

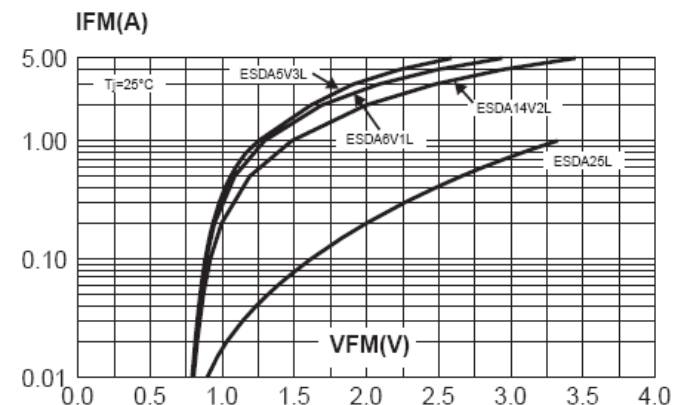
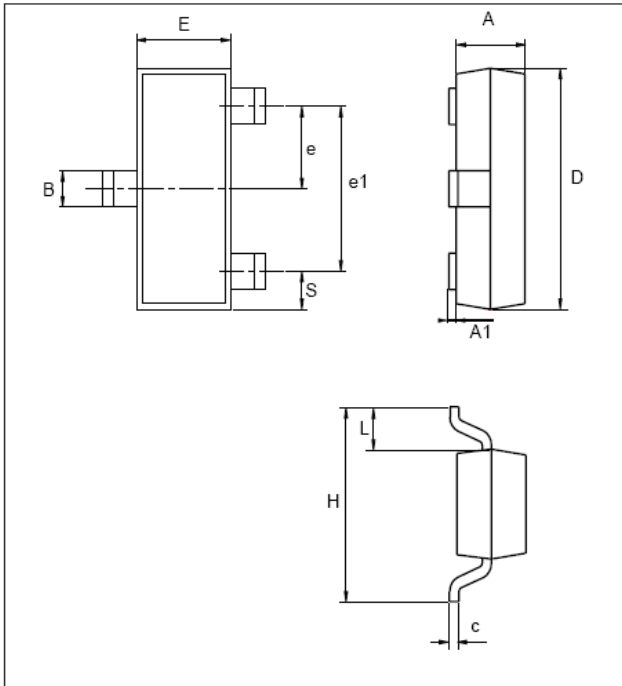


Fig6. Peak forward voltage drop versus peak forward current

Package Dimensions

SOT23 (Plastic)



REF.	DIMENSIONS			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.89	1.4	0.035	0.055
A1	0	0.1	0	0.004
B	0.3	0.51	0.012	0.02
c	0.085	0.18	0.003	0.007
D	2.75	3.04	0.108	0.12
e	0.85	1.05	0.033	0.041
e1	1.7	2.1	0.067	0.083
E	1.2	1.6	0.047	0.063
H	2.1	2.75	0.083	0.108
L	0.6 typ.		0.024 typ.	
S	0.35	0.65	0.014	0.026

FOOT PRINT (in millimeters)

