4-Line TVS Array

Features

- Ultra low leakage: nA level
- Low operating voltage: 5V
- Low clamping voltage
- Complies with following standards:
  - IEC 61000-4-2 (ESD) immunity test
    Air discharge: ±30kV
    Contact discharge: ±30kV
  - IEC610004-5 (Lightning)10A (8/20μs)
  - IEC61000-4-4 (EFT) 40A (5/50ns)
- ROHS Compliant

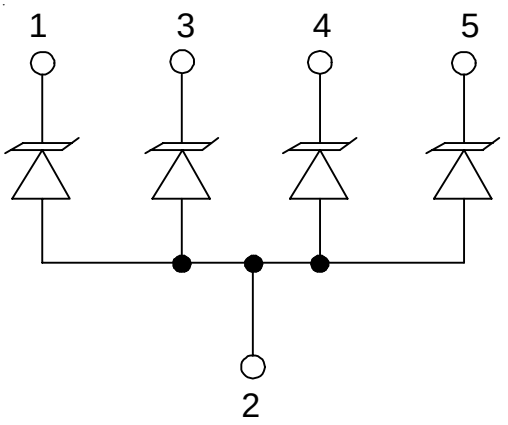
Mechanical Characteristics

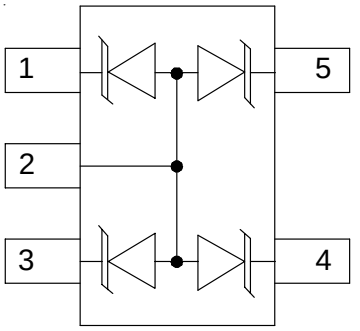
- Package: SOT353(SC70-5)
- Lead Finish: Matte Tin
- Case Material: “Green” Molding Compound.
- UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 3 per J-STD-020
- Shipping Qty : 3000pcs/7Inch Tape & Reel

Applications

- Cell phone Handsets and Accessories
- Microprocessor Based Equipment
- Personal Digital Assistants (PDA’s) and Pagers
- Desktops PC and Servers
- Notebook, Laptop, and Palmtop Computers
- Portable Instrumentation

Dimensions and Pin Configuration





4-Line TVS Array

Absolute Maximum Ratings (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs) (Vcc-GND)	P_{pk}	150	W
ESD per IEC61000-4-2 (Air) ESD per IEC61000-4-2 (Contact)	V_{ESD}	±30 ±30	kV
Operating Temperature Range	T_J	-55 to +125	℃
Storage Temperature Range	T_{stg}	-55 to +150	℃

Electrical Characteristics (TA=25℃ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V_{RWM}			5	V	
Breakdown Voltage	V_{BR}	6		9	V	I_T=1mA
Leakage Current	I_{Leak}			100	nA	V_{RWM}=5V
Clamping Voltage	V_C			11	V	I_{PP}=4.5A,Tp=8/20μs
Clamping Voltage	V_C			14	V	I_{PP}=10A,Tp=8/20μs
Junction Capacitance (I/O to GND)	C_J		60	90	pF	V_R=0V, f=1MHz,
Junction Capacitance (I/O to I/O)	C_J		30		pF	V_R=0V, f=1MHz,

4-Line TVS Array

Typical Performance Characteristics (T_A=25℃ unless otherwise Specified)

Fig1. 8/20μs Pulse Waveform

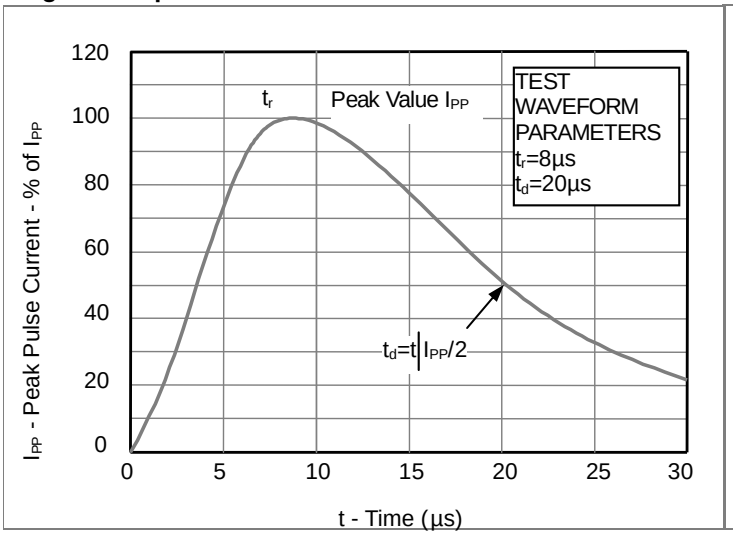


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

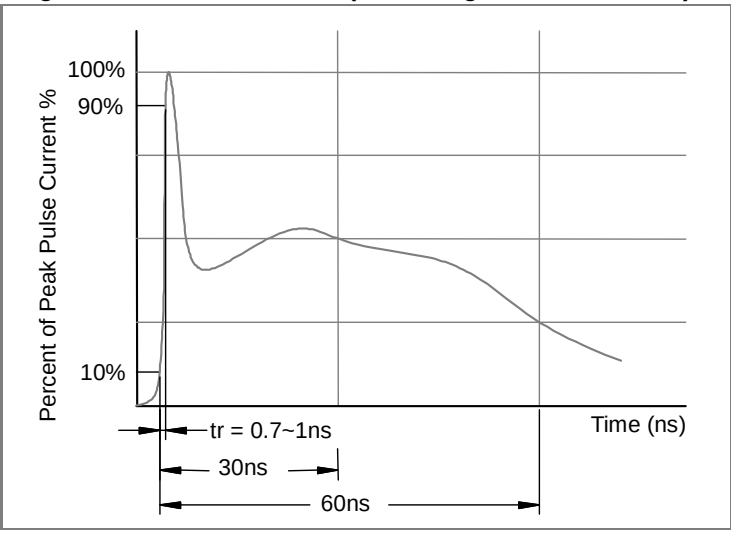
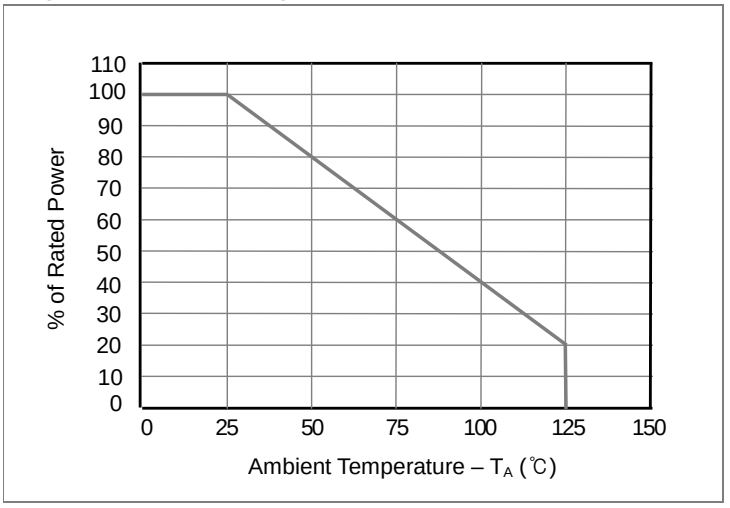
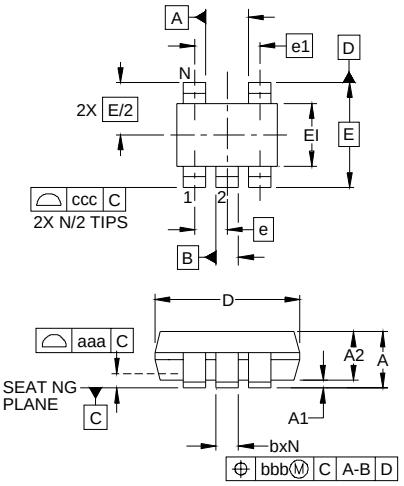


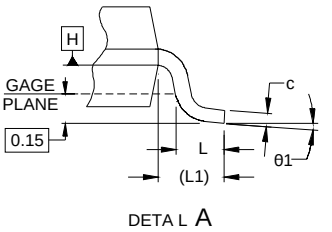
Fig3. Power Derating Curve

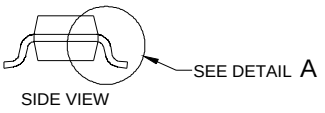


4-Line TVS Array

Outline Drawing - SOT-353







DIM	DIMENSIONS					
	INCHES			MILLIMETERS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	-	-	.043	-	-	1.10
A1	000	-	.004	0.00	-	0.10
A2	028	035	.039	0.70	0.90	1 00
b	006	-	.012	0.15	-	0 30
c	003	-	.009	0.08	-	0 22
D	075	079	.083	1.90	2.00	2.10
E1	045	049	.053	1.15	1.25	1 35
E	.083 BSC			2.10 BSC		
e	.026 BSC			0.65 BSC		
e1	051			1.30 BSC		
L	010	014	.018	0.26	0.36	0.46
L1	(017)			(0.42)		
N	5			5		
θ1	0°	-	8°	0°	-	8°
aaa	004			0.10		
bbb	004			0.10		
ccc	012			0.30		