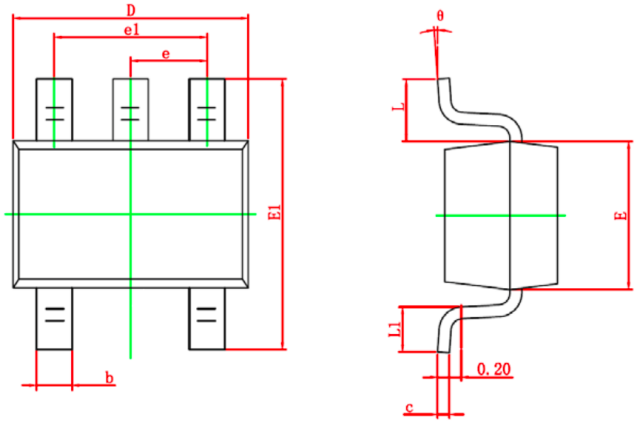
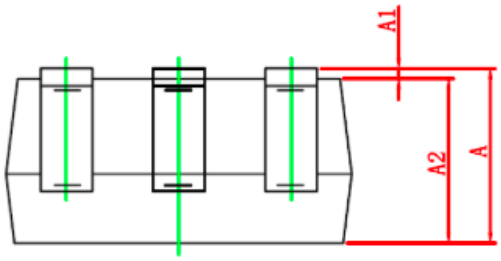
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4-Line Transient Voltage Suppressor Array

Description

The Standard TVS are designed to low voltage, integrated circuits from transients caused by electrostatic discharge (ESD), electrical fast transients (EFT) and other induced voltages.





Applications

- Computer Notebooks
- Communication Systems & Cellular Phones
- Printers
- Personal Digital Assistant(PDA)
- Video Equipment

Complies with the following standards

IEC61000-4-2

Level 4 15 kV (air discharge)

8 kV(contact discharge)

MIL STD 883E - Method 3015-7 Class 3

25 kV HBM (Human Body Model)

Features

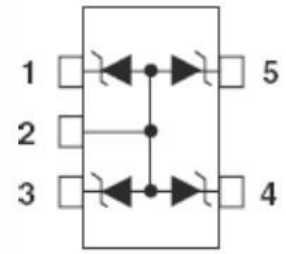
- 100 W Peak Pulse Power per Line (tp=8/20μs)
- Monolithic Structure
- Available in 4 Voltage Types:5V to 24V
- Low Clamping Voltage
- ESD Protection > 40 kilovolts
- Low Leakage Current
- Protects up to Four (4) Bidirectional Lines and
- Five(5) Unidirectional Lines
- RoHS compliant package

Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.008	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

Packing Information

3,000/Reel

Graphic symbol





RoHS
COMPLIANT

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4-Line Transient Voltage Suppressor Array

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

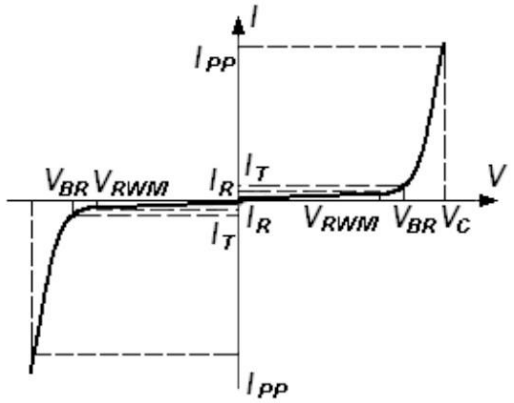
Absolute ratings @25˚C Unless Otherwise Specified

Symbol	Parameter	Value	Unit
P_{PP}	Peak Pulse Power (tp = 8/20μs) See Figure 1	100	W
T_J	Operating Supply Voltage (pin-1,-2 to pin-3)	-55 to +150	°C
T_{STG}	Storage Temperature Range	-55 to +150	°C

Electrical Characteristics

Part Numbers	VBR			Ir	VRWM	IR	C
	Min.	Typ.	Max.				TYP
	V	V	V	mA	V	uA	PF
ESMF3V3	5.3	5.6	5.88	1	3.3	1	50
ESMF05	6.1	6.7	7.2	1	5	1	35
ESMF12	13.3	14.5	15	1	12	1	30

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
I_T	Test Current
V_{BR}	Breakdown Voltage @ I_T



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4-Line Transient Voltage Suppressor Array

■Typical Device Characteristics

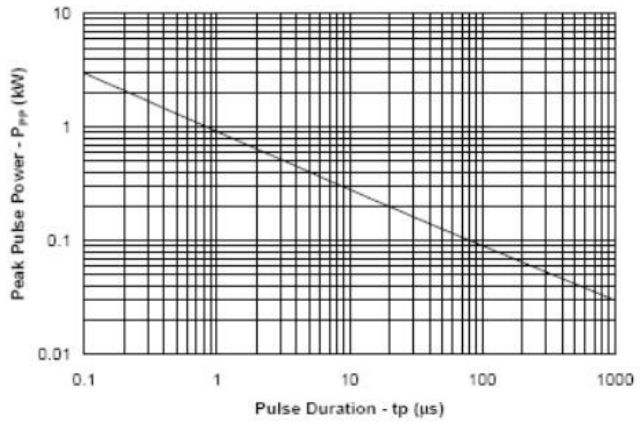


FIG.1-NON-REPETITIVE PEAK PULSE POWER VS. TIME

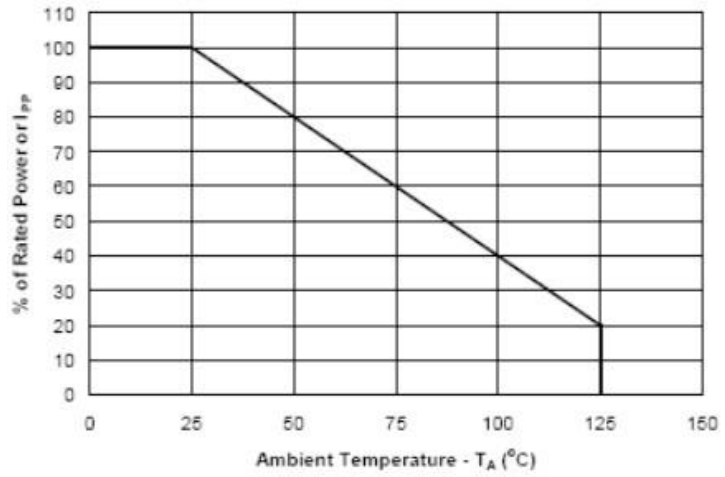


FIG.2-POWER DERATING CURVE

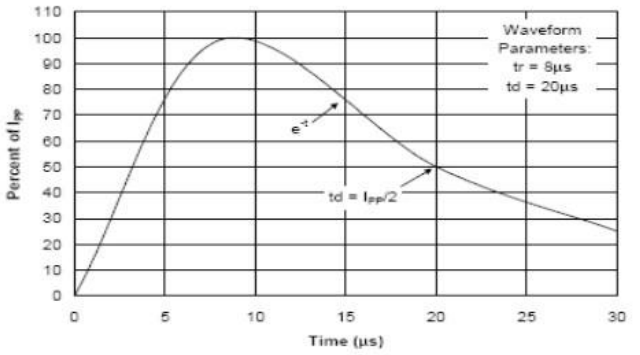


FIG.3-POWER WAVEFORM

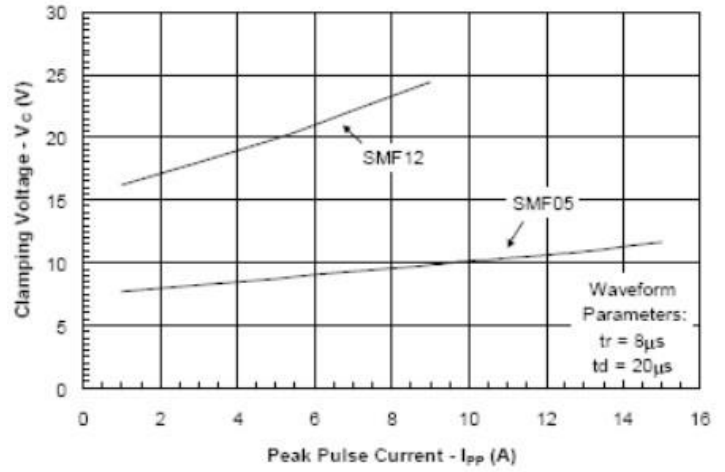


FIG.4-CLAMPING VOLTAGE VS. PEAK PULSE CURRENT

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4-Line Transient Voltage Suppressor Array

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