

ESMF05

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 ($t_p=8/20\mu s$)
- 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

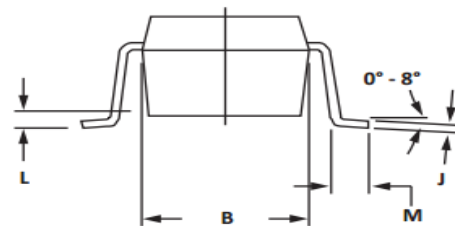
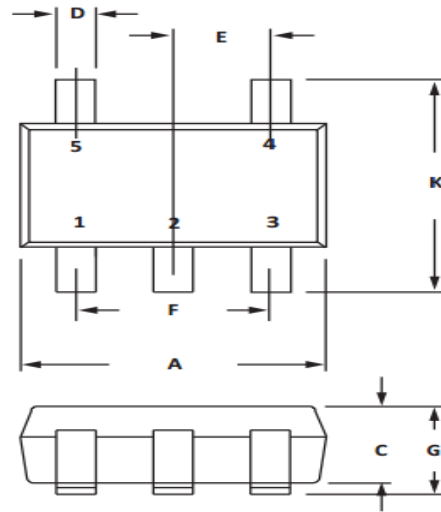
Packing & Order Information

Shipping : 3,000/Reel



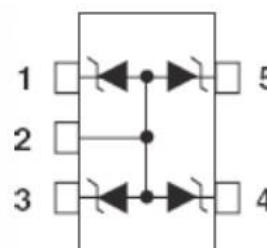
**RoHS
COMPLIANT**

SOT-353



OUTLINE DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.900	2.150	0.074	0.084
B	1.150	1.350	0.045	0.055
C	0.800	1.000	0.031	0.040
D	0.150	0.300	0.005	0.012
E	0.65 BSC		0.65 BSC	
F	1.30 BSC		1.30 BSC	
G	0.800	1.100	0.031	0.043
J	0.080	0.250	0.003	0.010
K	2.000	2.400	0.078	0.095
L	-	0.100	-	0.004
M	0.260	0.460	0.010	0.018

Graphic symbol



ESMF05

4-Line Transient Voltage Suppressor Array

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

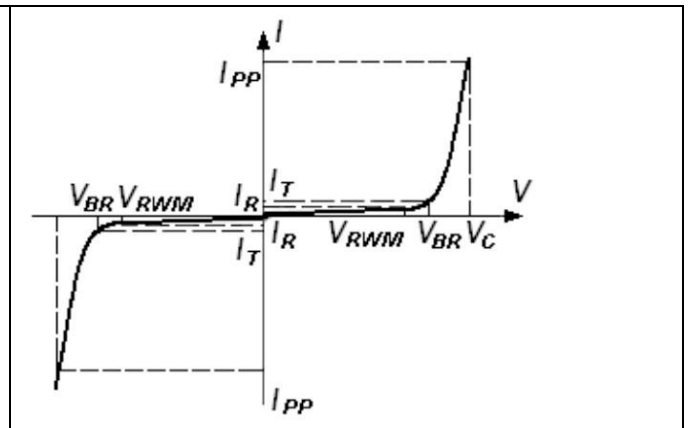
Absolute ratings @25°C Unless Otherwise Specified

Symbol	Parameter	Value	Unit
P _{PP}	Peak Pulse Power (t _p = 8/20μs) See Figure 1	100	W
T _J	Operating Supply Voltage (pin-1,-2 to pin-3)	-55 to +125	°C
T _{STG}	Storage Temperature Range	-55 to +150	°C

Electrical Characteristics

Part Numbers	VBR			I _r	VRWM	I _R	C TYP PF
	Min.	Typ.	Max.				
	V	V	V				
ESMF05	6.1	6.7	7.2	1	5	1	35

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



ESMF05

4-Line Transient Voltage Suppressor Array

Typical Device Characteristics

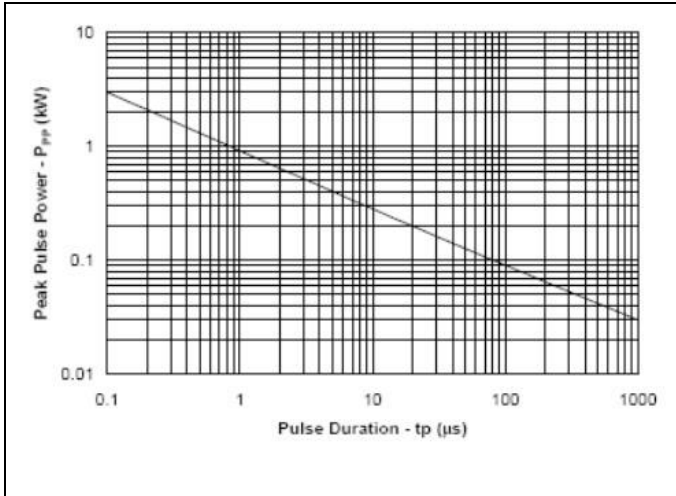


FIG.1-NON-REPETITIVE PEAK PULSE POWER VS. TIME

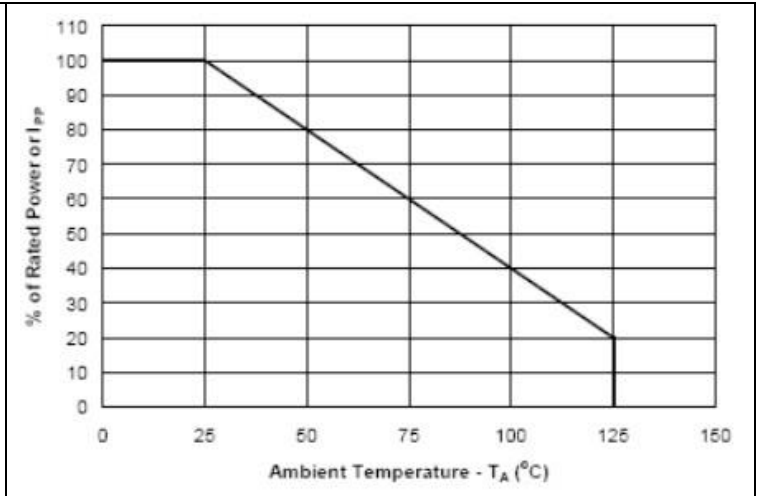


FIG.2-POWER DERATING CURVE

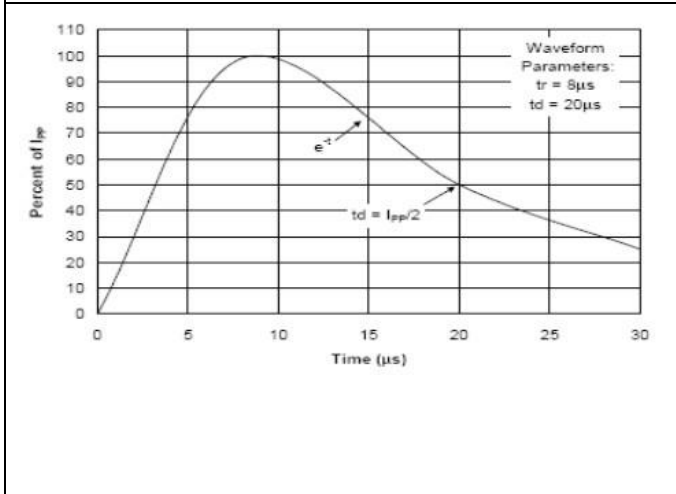


FIG.3-POWER WAVEFORM

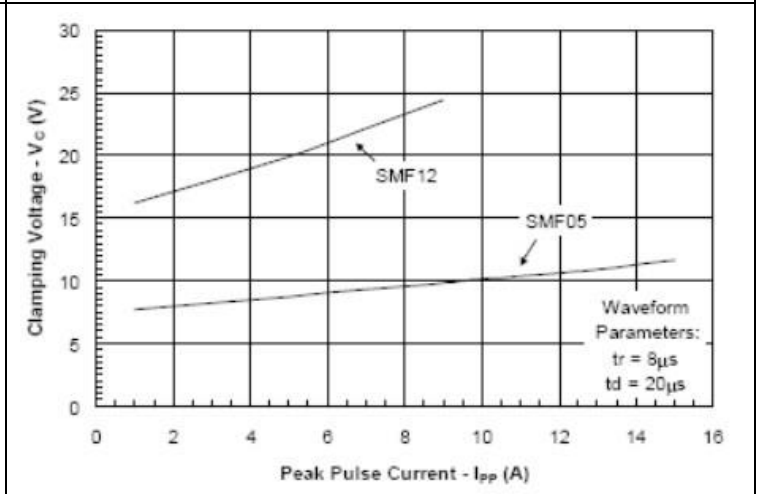


FIG.4-CLAMPING VOLTAGE VS. PEAK PULSE CURRENT

ESMF05

4-Line Transient Voltage Suppressor Array

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