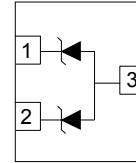


Description

The SES5VN1616-3 is a TVS array designed to protect I/O or data lines from the damaging effects of ESD. The DFN-3 is a very small package which allows space saving on high density printed circuit board and also gives the designer the flexibility to provide Uni-Directional or Bi-Directional protection.



Feature

- Solid-state silicon-avalanche technology
- DFN-3 package
- Uni-Directional or Bi-Directional protection
- Protects up to two data lines
- 125 Watts peak pulse power ($t_p = 8/20\mu s$)
- Working voltage: 5V
- Low clamping factor
- Low leakage current
- Complies with the following standards:
IEC 61000-4-2 (ESD) Air-15kv, Contact-8kv

Applications

- Cellular Handset
- PDA
- Notebook
- Digital Camera
- Wifi Phone

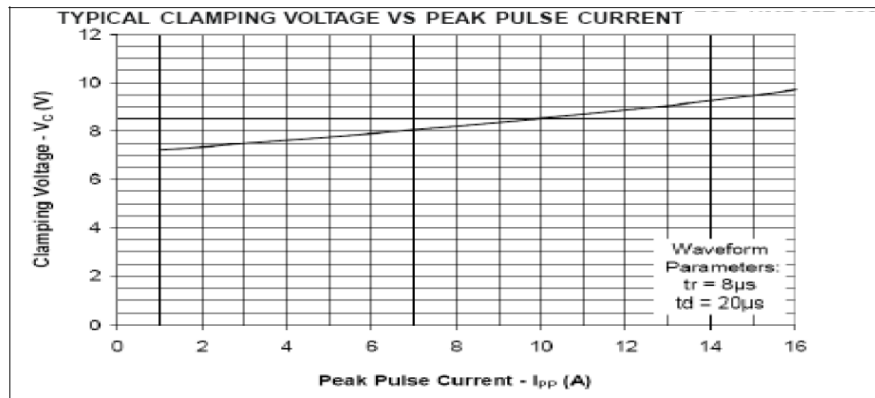
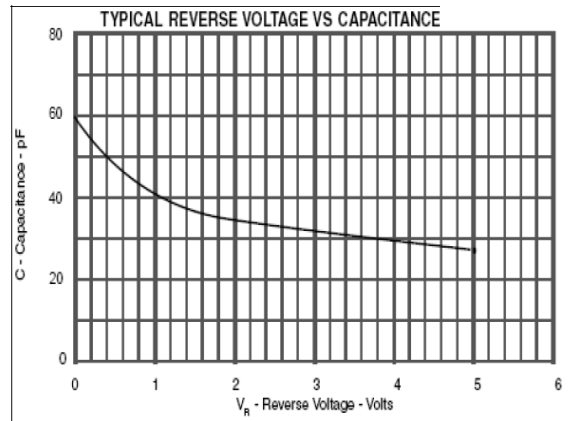
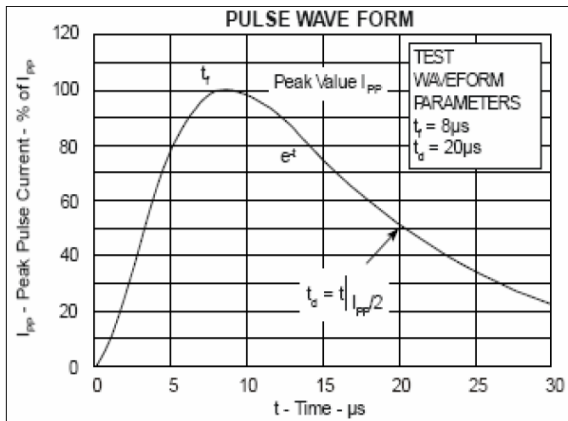
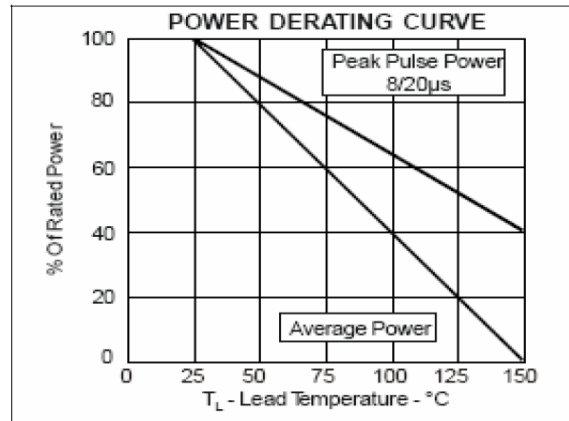
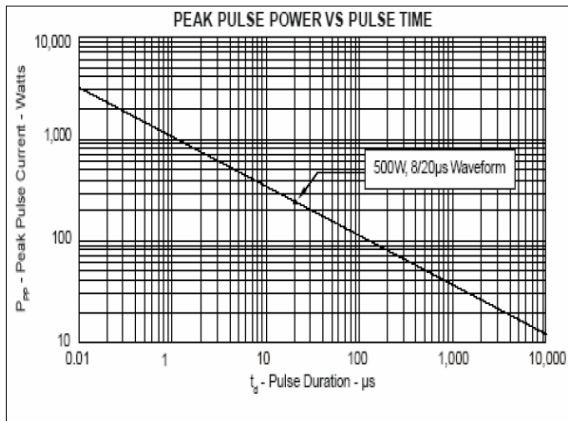
Electrical characteristics per line@25°C(unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse stand-off voltage	V_{RWM}				5	V
Reverse Breakdown voltage	V_{BR}	$I_t = 1mA$	6			V
Reverse Leakage Current	I_R	$V_{RWM} = 5V$ $T=25^\circ C$			1	μA
Clamping Voltage	V_C	$I_{PP} = 1A$ $t_p = 8/20\mu S$			15	V
Clamping Voltage	V_C	$I_{PP} = 5A$ $t_p = 8/20\mu S$			25	V
Junction Capacitance	C_j	$V_R=0V$ $f = 1MHz$ Pin1 to Pin2		0.6	1.5	pF
Junction Capacitance	C_j	$V_R=0V$ $f = 1MHz$ Pin1 or Pin2 to Pin3			1.5	pF

**Absolute maximum rating @25°C**

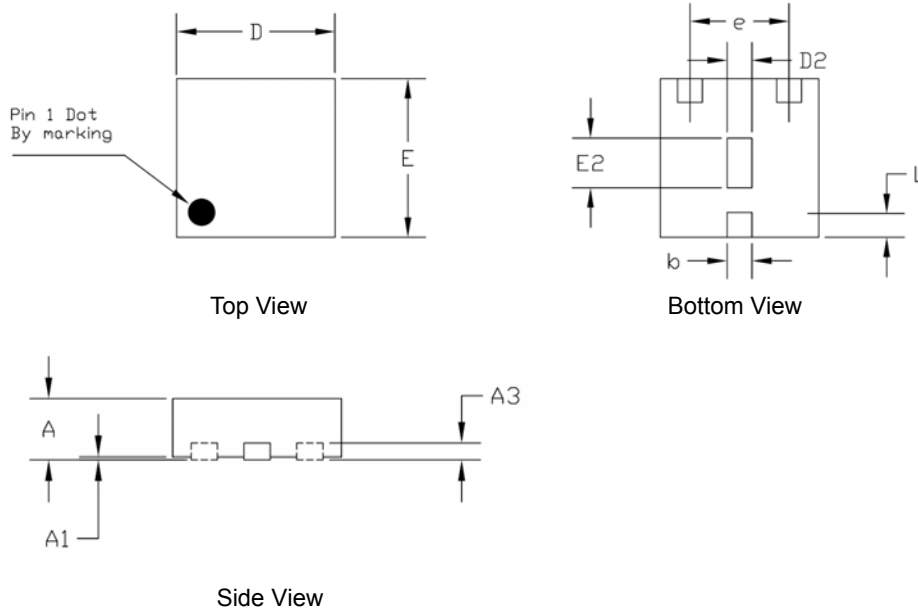
Rating	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu S$)	P_{pp}	125	W
Peak Pulse Power ($t_p=8/20\mu S$)	I_{pp}	5	A
ESD per IEC 61000-4-2 (Air)	V_{ESD}	15	kV
ESD per IEC 61000-4-2 (Contact)	V_{ESD}	8	kV
Operating Temperature	T_J	-55 to +125	°C
Storage Temperature	T_{STG}	-55 to +150	°C

Typical Characteristics





Product dimension



Common Dimensions (mm)			
PKG.	UT: Ultra thin		
Ref.	Min.	Nom.	Max
A	0.50	-	0.60
A1	0.00	-	0.05
A3	0.15 Ref.		
D	1.55	1.60	1.65
E	1.55	1.60	1.65
B	0.20	0.25	0.30
D2	0.20	0.25	0.30
E2	0.45	0.50	0.55
L	0.20	0.25	0.30
b	0.20	0.25	0.30
e	1.00 BSC		

Revision History

Revision	Date	Changes
1.0	2008-7-3	-