

ESR12

LOW CAPACITANCE TVS ARRAY

Description

The ESR12 is a transient voltage suppressor designed to protect components, which are connected to data and transmission lines against ESD. It clamps the voltage just above the logic level supply for positive transients and to a diode drop below ground for negative transients.

Features

- 150 W Peak Pulse Power per Line (tp=8/20us)
- Low Clamping Voltage
- ESD Protection > 25 kilovolts
- Unidirectional Configuration
- Low Leakage Current
- PROTECTS 2 I/O PORTS & POWER

IEC compatibility

IEC61000-4-2(ESD): Air – 15kV, Contact – 8kV

IEC61000-4-4(EFT): 40A – 5/50ns

IEC61000-4-5(Surge):24A,8/20µs Level

2(Line-Gnd)&level 3(Line-Line)

- RoHS Compliant package

Mechanical Data

- Molded JEDEC SOT-143 Package
- Approximate Weight: 5 milligrams
- Lead-Free Pure-Tin Plating (Annealed)
- Solder Reflow Temperature: Pure-Tin - Sn, 100:

260-270°C

- 8mm Tape and Reel Per EIA Standard 481
- Flammability Rating UL 94V-0

Applications

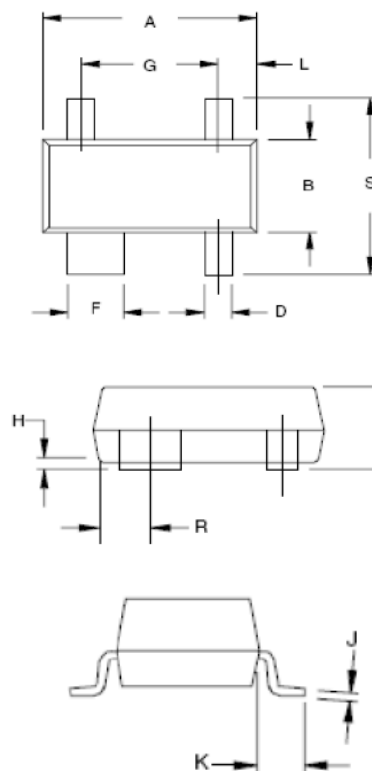
- Etchnet 10/100 base
- Wireless Communications
- Fire Wire
- USB Interface & data line protection
- T1/E1 secondary IC side protection
- Portable electronics

Packing & Order Information

3,000/Reel

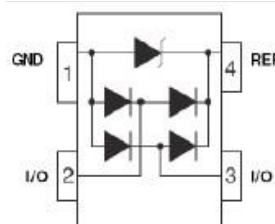


**RoHS
COMPLIANT**



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.80	3.04	0.110	0.120
B	1.20	1.39	0.047	0.055
C	0.84	1.14	0.033	0.045
D	0.39	0.50	0.015	0.020
F	0.79	0.93	0.031	0.037
G	1.78	2.03	0.070	0.080
H	0.013	0.10	0.0005	0.004
J	0.08	0.15	0.003	0.006
K	0.46	0.60	0.018	0.024
L	0.445	0.60	0.0175	0.024
R	0.72	0.83	0.028	0.033
S	2.11	2.48	0.083	0.098

Graphic symbol



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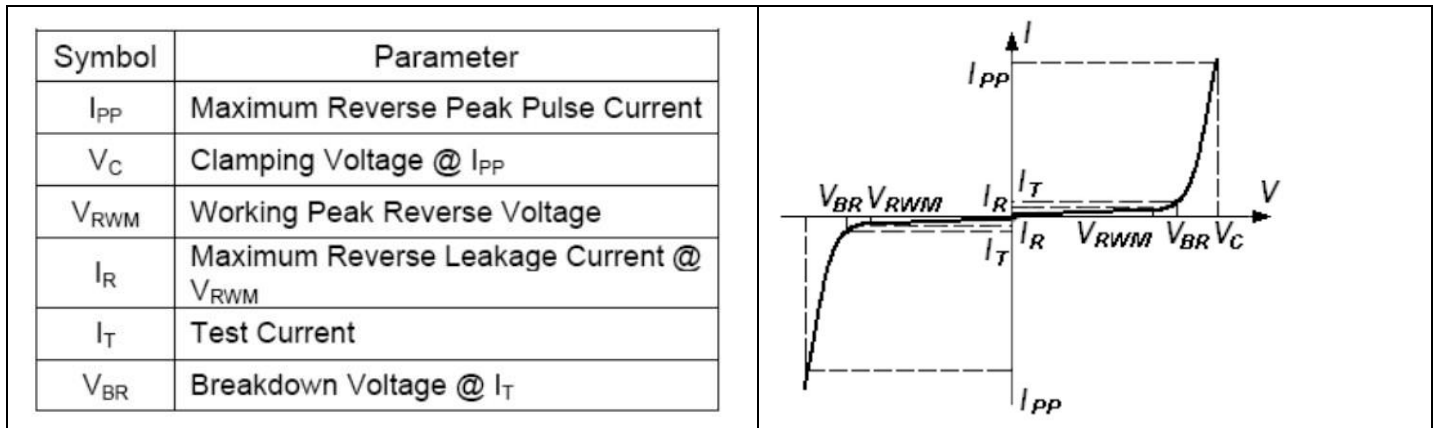
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Absolute ratings (limiting value)

Symbol	Parameter	Value	Unit
PPK	Peak Pulse Power (tp = 8/20μs)	150	W
VF	Peak Forward Voltage – IF=1A, 2/20μs	1.5	V
Tj	Operating Voltage	-55 to +125	°C
TSTG	Storage Temperature Range	-55 to +150	°C
T _L	Lead Solder Temperature – Maximum (10 Second Duration)	260	°C

Electrical Characteristics (T_J=25°C unless otherwise noted)

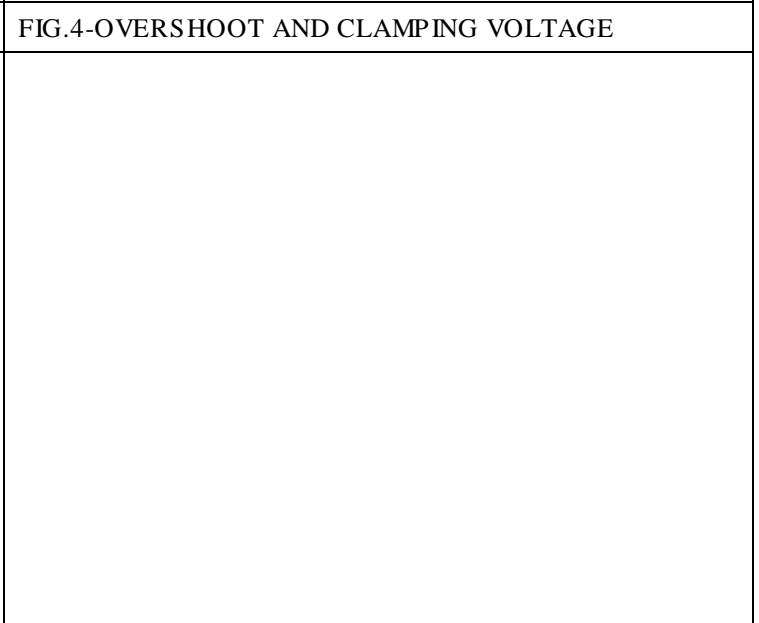
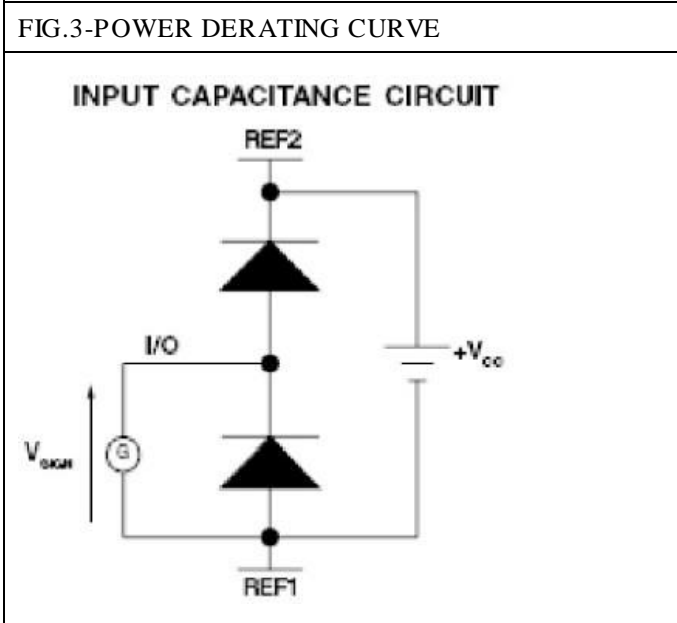
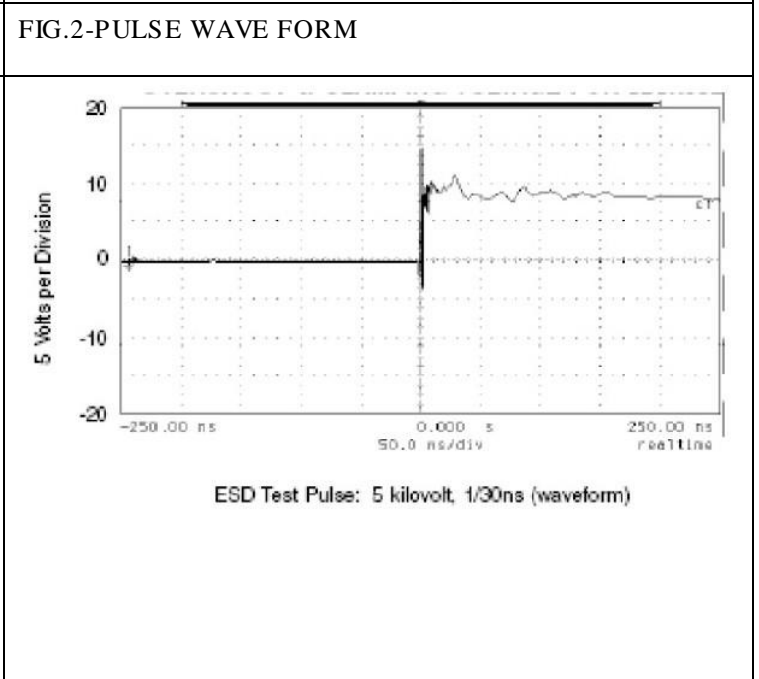
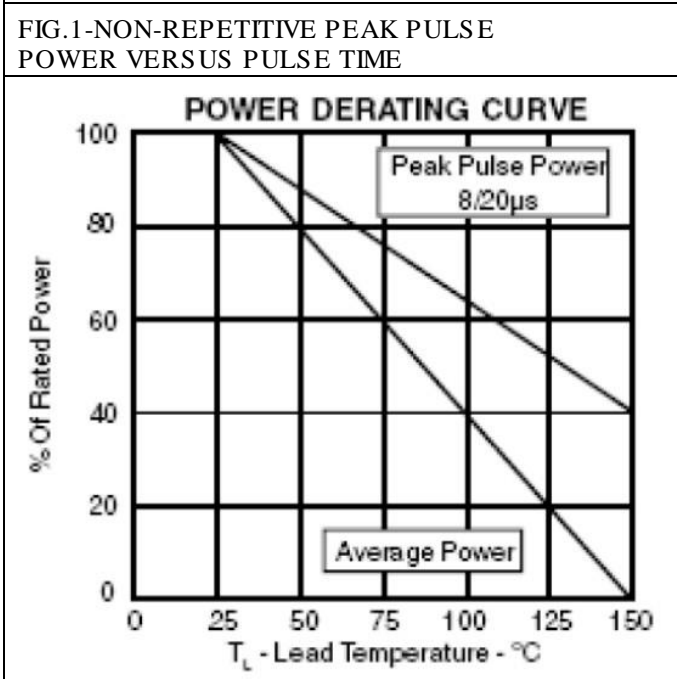
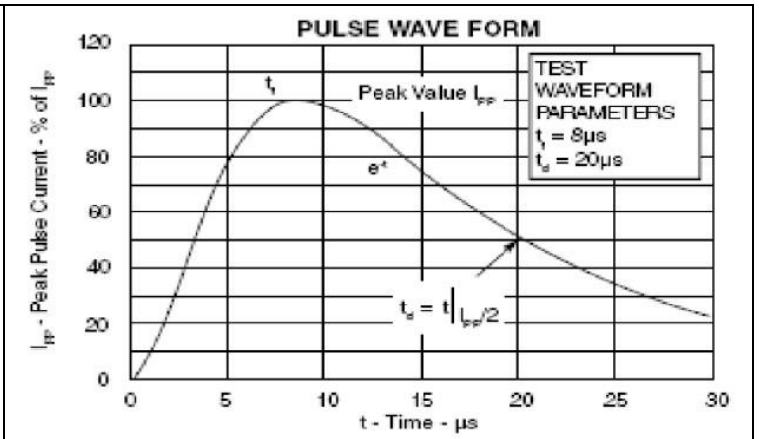
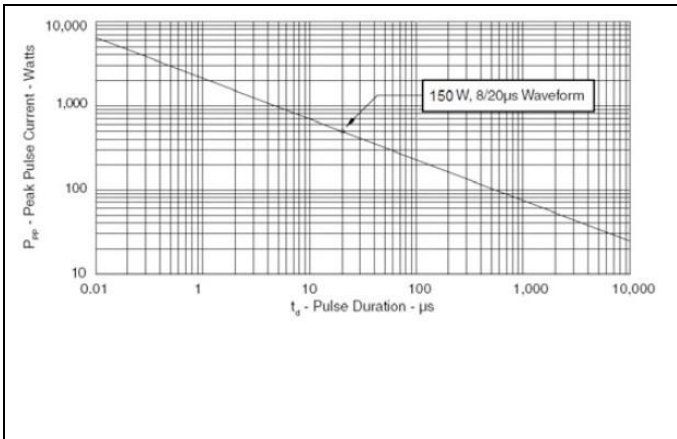
Part Numbers	VBR			IT	VRM	IRM	VF max	IF	Cj typ
	Min.	Typ.	Max.						
	V	V	V						
ESR12	13.3	14	16.5	1	12	1	1.25	200	0.6



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Typical Device Characteristics



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Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE

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