

ESD3Z24V

Transient Voltage Suppressors for ESD Protection

Description

The ESD3Z24V is designed to protect voltage sensitive components from ESD and transient voltage events.

Excellent clamping capability, low leakage, and fast response time, make these parts ideal for ESD protection on designs where board space is at a premium.

Features

- 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)
- Unidirectional & Bidirectional Configuration
- Protects One Power or I/O Port
- Low Clamping Voltage
- Ultra Low Capacitance: 3pF (Typical)
- RoHS compliant package
- REACH Compliant

Mechanical Data

- Molded JEDEC SOD-323 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:

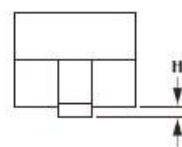
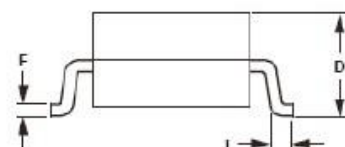
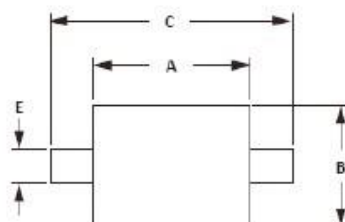
- Cellular Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA'S)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Pagers Peripherals

Packing & Order Information

Shipping : 3,000/Reel



**RoHS
COMPLIANT**

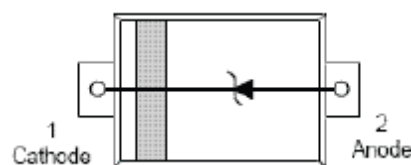


OUTLINE DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.60	1.90	0.063	0.075
B	1.15	1.45	0.045	0.057
C	2.39	2.70	0.094	0.106
D	0.80	1.10	0.031	0.043
E	0.25	0.40	0.010	0.016
F	0.10	0.20	0.004	0.008
H	-	0.10	-	0.004
L	0.20	-	0.008	-

NOTES

1. Controlling dimension: millimeters.
2. Dimensioning and tolerances per ANSI Y14.5M, 1985.
3. Dimensions are exclusive of mold flash and metal burrs.

Graphic symbol



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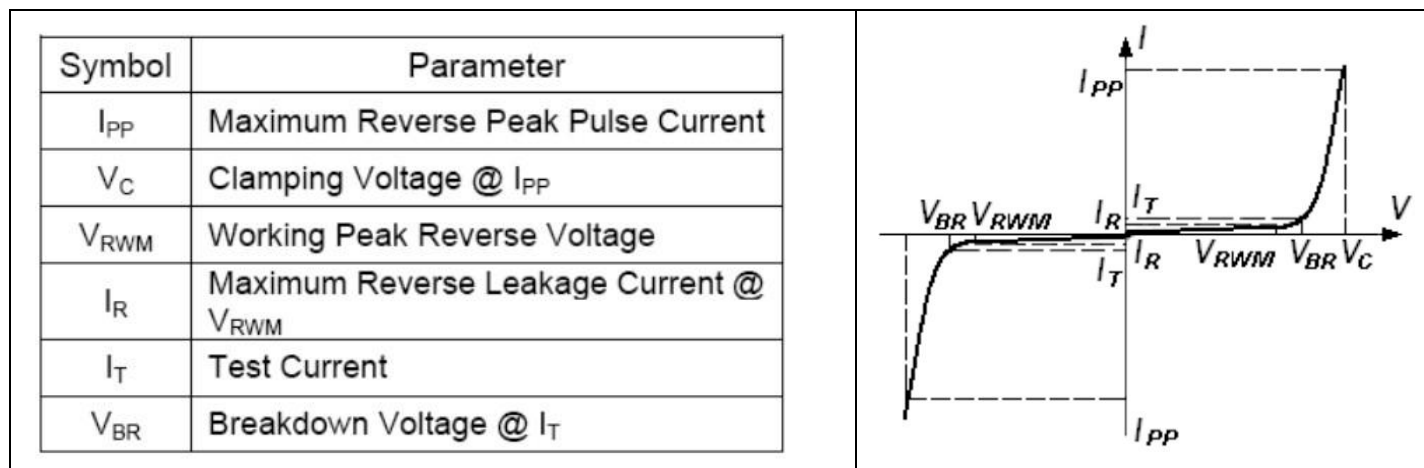
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Absolute ratings (limiting value)

Symbol	Parameter	Value	Unit
Ppk	Peak Pulse Power (tp = 8/20μs)	350	W
Ipp	Maximum Peak Pulse Current (tp = 8/20μs)	24	A
TJ	Operating Temperature	-55 to +125	°C
TSTG	Storage Temperature	-55 to +150	°C
TL	Lead Solder Temperature – Maximum (10 Second Duration)	260	°C

Electrical Characteristics

Part Numbers	VBR			IT	VRWM	IR	Cj TYP
	Min.	Typ.	Max.				
	V	V	V	mA	V	uA	PF
ESD3Z24V	24.4	27.0	30.3	1	24	1	50



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■ Typical Device Characteristics

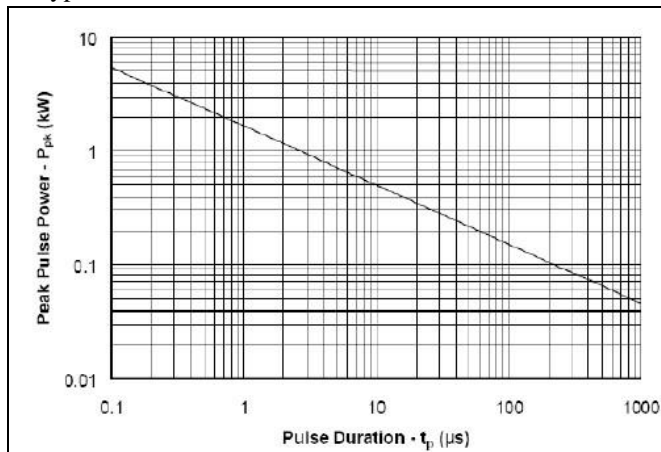


FIG.1-NON-REPETITIVE PEAK PULSE POWER VS. TIME

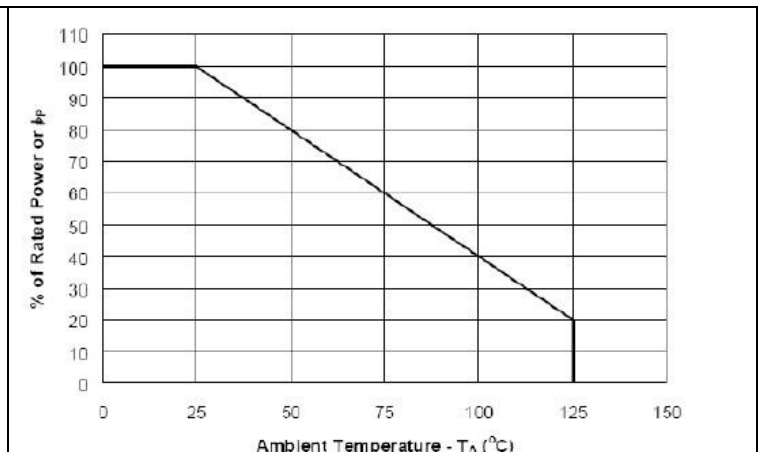


FIG.2-POWER DERATING CURVE

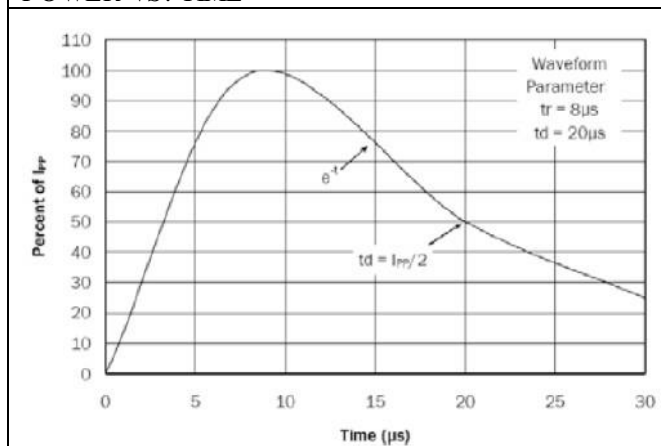


FIG.3-CLAMPING VOLTAGE VS. PEAK PULSE CURRENT

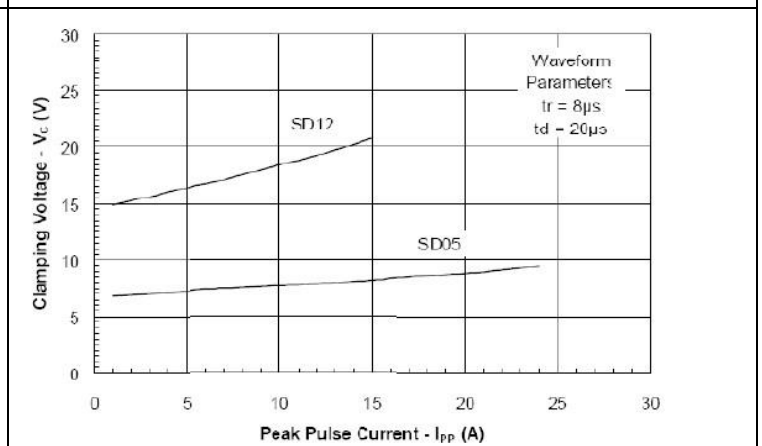


FIG.4-FORWARD VOLTAGE VS. FORWARD CURRENT

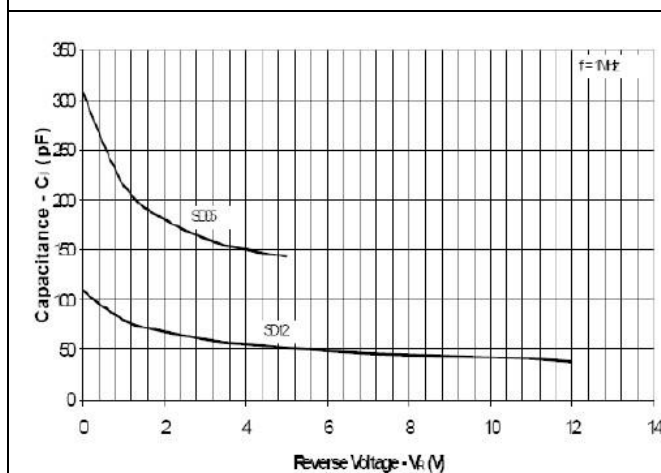


FIG.5-CAPACITANCE VS. REVERSE VOLTAGE

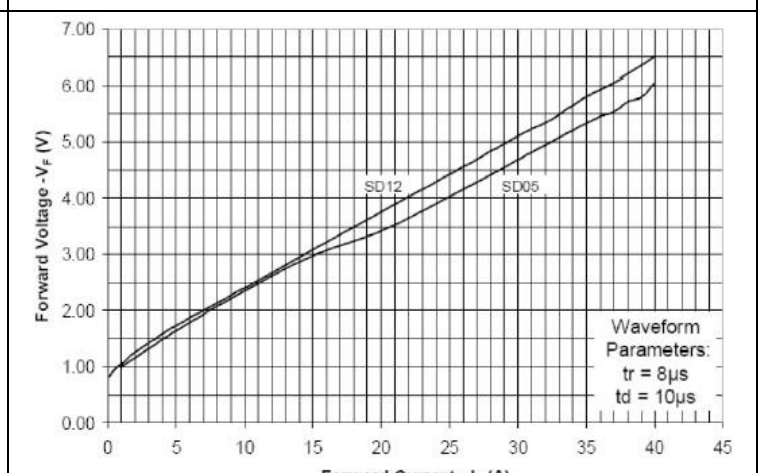


FIG.6-FORWARD VOLTAGE VS. FORWARD CURRENT

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