

ESD3ZxxC

Transient Voltage Suppressors for ESD Protection

Description

The ESD3ZxxC 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

- Small Body Outline Dimensions
- Low Body Height
- Peak Power up to 350 Watts @ 8 x 20 μ s Pulse
- Low Leakage current
- Response Time is Typically < 1 ns
- ESD Rating of Class 3 (> 16 kV) per Human Body

Model

- RoHS compliant package

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

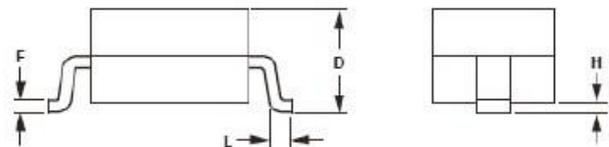
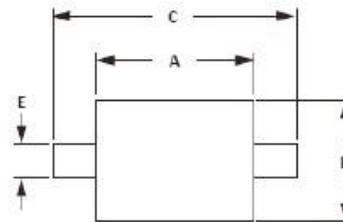
25 kV HBM (Human Body Model)

Applications:

- Cellular phones
- Portable devices
- Digital cameras
- Power supplies

Packing & Order Information

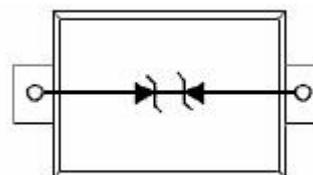
Shipping : 3,000/Reel



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



RoHS
COMPLIANT

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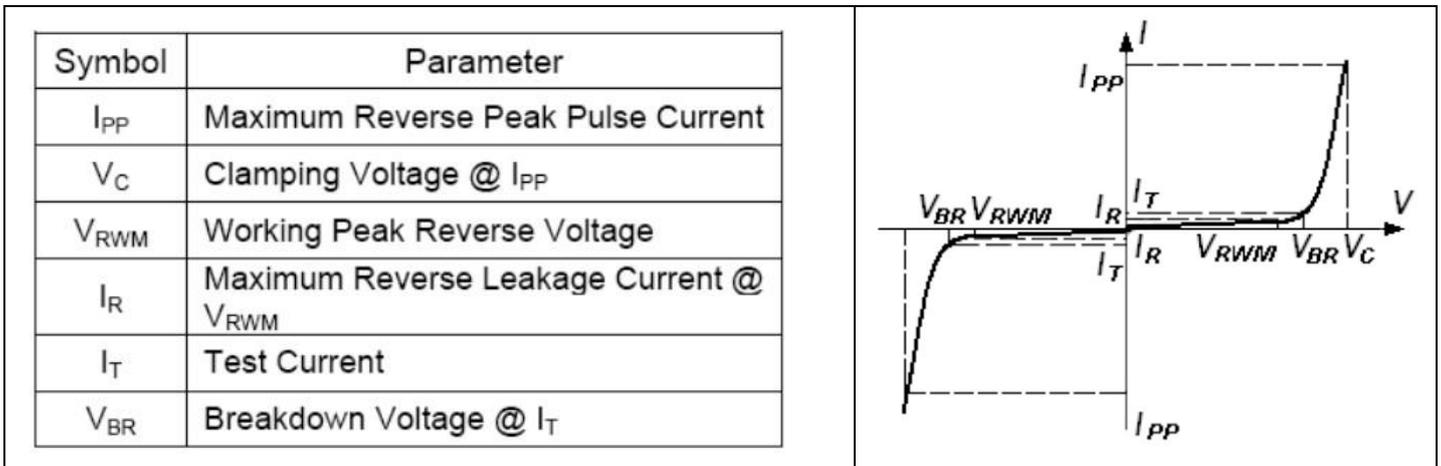
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Absolute ratings ($T_{amb}=25^{\circ}\text{C}$)

Symbol	Parameter	Value	Unit
Ppk	Peak Pulse Power ($t_p = 8/20\mu\text{s}$)	350	W
T_L	Maximum lead temperature for soldering during 10s	260	$^{\circ}\text{C}$
T_{STG}	Storage Temperature Range	-55 to +150	$^{\circ}\text{C}$
TOP	Operating Temperature Range	-40 to +125	$^{\circ}\text{C}$
T_J	Maximum junction temperature	150	$^{\circ}\text{C}$

Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

Part Numbers	VBR			IT mA	VRWM V	IR uA	Cj TYP(Note1) PF
	Min. V	Typ. V	Max. V				
	ESD3Z5C	5.4	6.7				7.8
ESD3Z12C	13.3	14.5	15.7	1	12.0	1	35
ESD3Z15C	16.7	18.0	19.0	1	15.0	1	50



Typical Characteristics

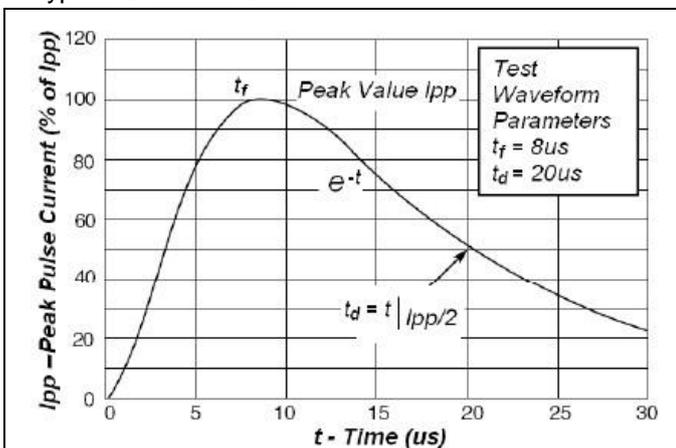


FIG.1-PULSE WAVEFORM

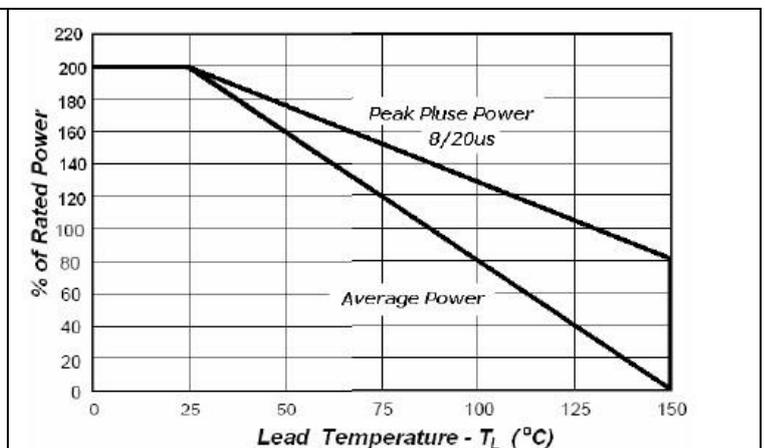


FIG.2-POWER DERATING CURVE

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