

**DESCRIPTION**

The ESD3Z3.3C-ESD3Z36C is available in SOD-323 package.

MECHANICAL DATA

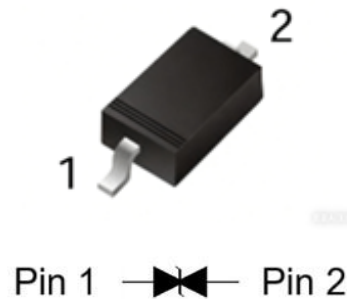
- Case: SOD-323
- Flammability Rating: UL94V-0

ORDERING INFORMATION

Package Type	Part Number
SOD-323	ESD3Z3.3C
	ESD3Z5C
	ESD3Z8C
	ESD3Z12C
	ESD3Z15C
	ESD3Z18C
	ESD3Z20C
	ESD3Z24C
	ESD3Z36C
Note	SPQ: 3,000pcs/Reel
AiT provides all RoHS Compliant Products	

FEATURE

- IEC61000-4-2(ES±30kV(air), ±30kV(contact)
- IEC61000-4-4(EFT) 40A(5/50ns)
- 350Watts Peak Pulse Power per (tp=8/20us)
- Protects one I/O line(unidirectional)
- Low clamping voltage
- Working voltages:
3.3V, 5V, 8V, 12V, 15V, 18V, 20V, 24V, 36V
- Low leakage current

PIN DESCRIPTION**ABSOLUTE MAXIMUM RATINGS**

T_a = 25°C, unless otherwise specified

V _{ESD} , ESDperIEC61000-4-2(Air)	±30KV
V _{ESD} , ESDperIEC61000-4-2 2(Contact)	±30KV
P _{PP} , Peak Pulse Power (8/20us)	350W
T _{OPT} , Operating Temperature	-55°C ~ + 150°C
T _{STG} , Storage Temperature Range	-55°C ~ + 150°C
T _L , Lead Soldering Temperature-Maximum (10 second Duration)	260°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

**ELECTRICAL CHARACTERISTICS**T_A = 25°C, unless otherwise specified

PART NUMBER	VRWM (V) (max.)	VB (V) (min.)	IT (mA)	Vc@1A (V) (max.)	Vc (V) (max.) (@A)		IR (μ A) (max.)	CT (pF) (max.)
ESD3Z3.3C	3.3	4	1	7.5	13	20	40	15
ESD3Z5.0C	5	6	1	9.8	18	17	10	200
ESD3Z8.0C	8	8.5	1	13.4	24	15	2	120
ESD3Z12C	12	13.3	1	19	32	11	1	75
ESD3Z15C	15	16.7	1	24	38	10	1	68
ESD3Z18C	18	20	1	29	45	9	1	57
ESD3Z20C	20	22.3	1	35	50	8	1	52
ESD3Z24C	24	26.7	1	43	52	7	1	50
ESD3Z36C	36	40	1	60	75	5	1	35



TYPICAL PERFORMANCE CHARACTERISTICS

Fig 1. Non-Repetitive Peak Pulse Power vs.

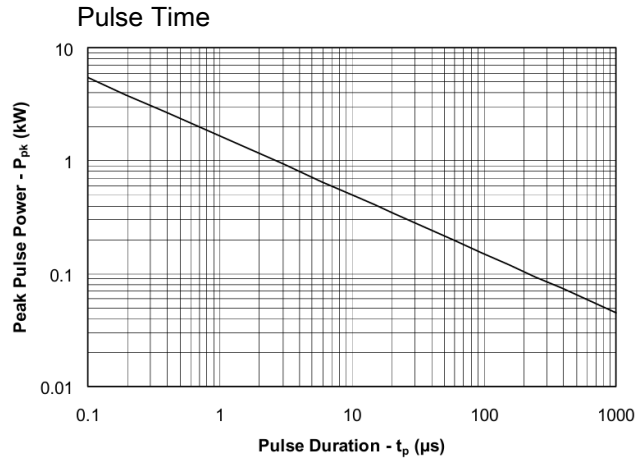


Fig 2. Power Derating Curve

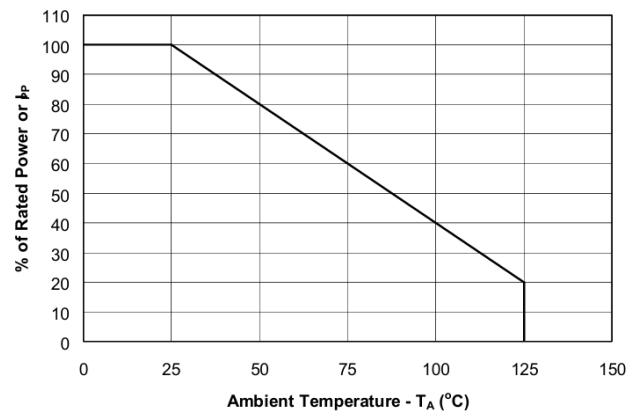


Fig 3. Pulse Waveform

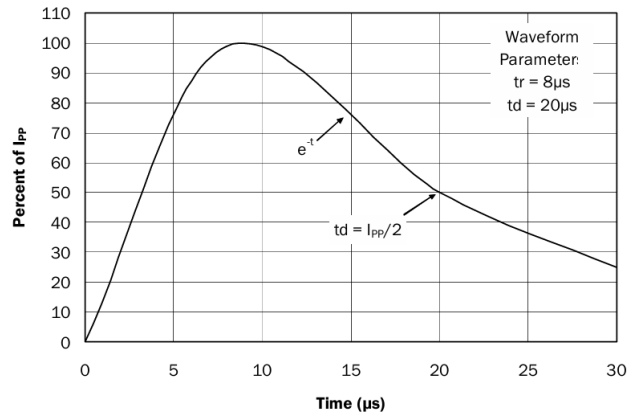


Fig 4. Clamping Voltage vs. Peak Pulse Current

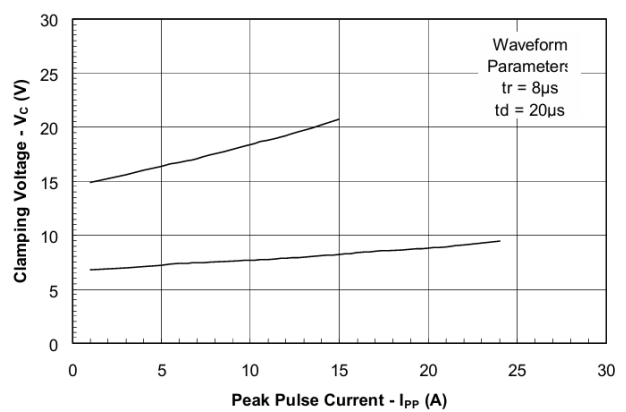


Fig 5. Capacitance vs. Reverse Voltage

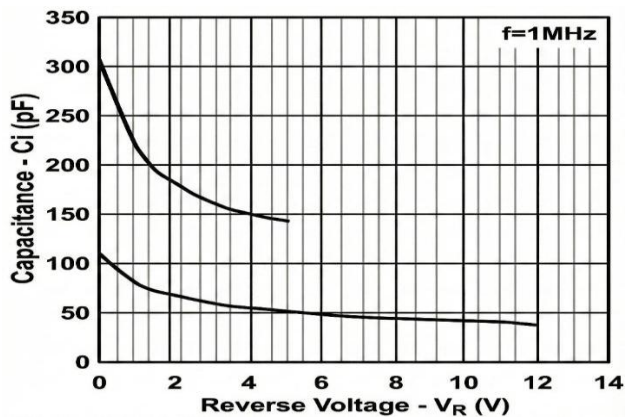
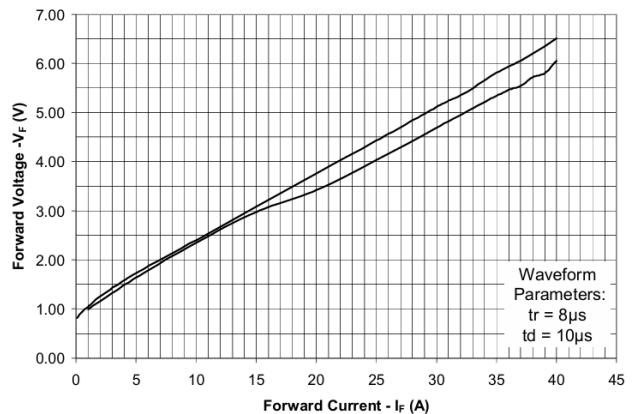


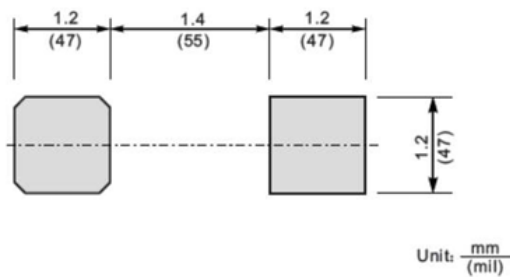
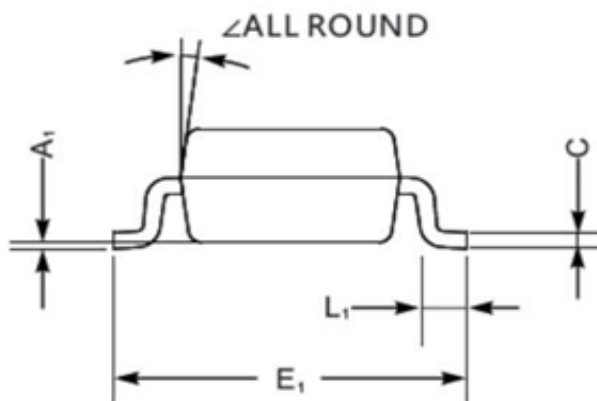
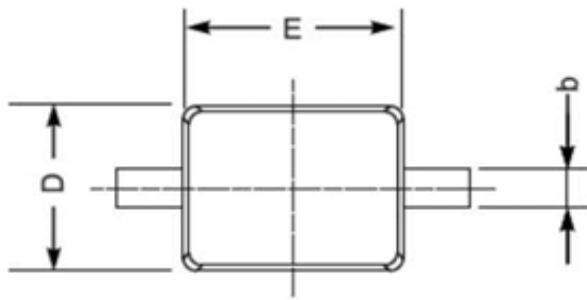
Fig 6. Forward Voltage vs. Forward Current





PACKAGE INFORMATION

Dimension in SOD-323 Package



The recommended mounting pad size

DIM	MILLIMETERS	
	MIN	MAX
A	0.800	1.100
A1	-	0.200
b	0.250	0.400
C	0.080	0.150
D	1.200	1.400
E	1.400	1.800
E1	2.550	2.750
L1	0.200	0.450
∠	9°	

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