

PRIMARY CHARACTERISTICS

P_{PK}	350W
V_{RWM}	3.3V ,5V,12V
V_F	1.25V
$T_{J,Max}$	125°C

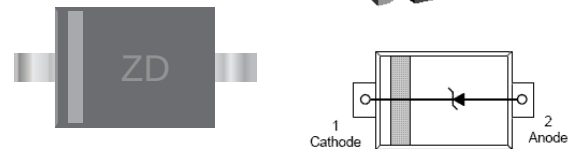
FEATURES

- Small Body Outline Dimensions
- 350 Watts peak pulse power ($t_p = 8/20\mu s$)
- Transient protection for data lines to
- Small package for use in portable electronics
- Suitable replacement for MLV's in ESD protection applications
- Protects one I/O or power line
- Low clamping voltage
- Low leakage current
- Solid-state silicon-avalanche technology

SOD-323 PACKAGE

Marking Code : Please refer to the specification

Ex : SESD3Z3V3



APPLICATIONS

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

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

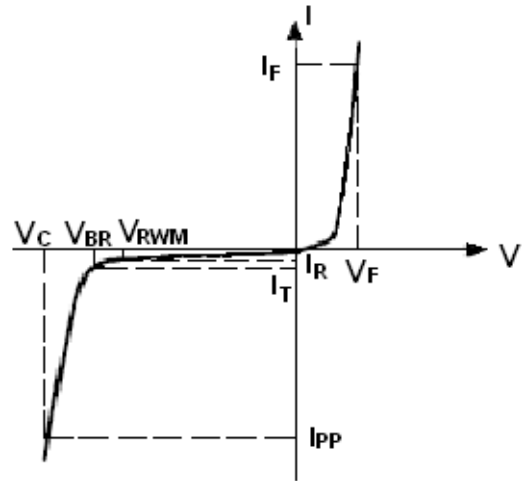
25 kV HBM (Human Body Model)

GENERAL DESCRIPTION

The SESD3Z series 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.

Electrical Parameter

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
I_T	Test Current
V_{BR}	Breakdown Voltage @ I_T
I_F	Forward Current
V_F	Forward Voltage @ I_F



Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Part Numbers	V_{BR}			I_T	V_{RWM}	I_R	V_F	I_F	C	Marking
	Min	Typ	Max				Max.		Typ. (Note1)	
	V	V	V				V		pF	
SESD3Z3V3	5.0	6.0	7.0	1.0	3.3	1	1.25	200	35	ZD
SESD3Z5V	6.1	6.7	7.2	1.0	5.0	1	1.25	200	30	5V
SESD3Z12V	13.3	14.0	14.7	1.0	12.0	1	1.25	200	25	6U

1、Capacitance is measured at $f=1\text{MHz}$, $V_R=0\text{V}$, $T_A=25^\circ\text{C}$.

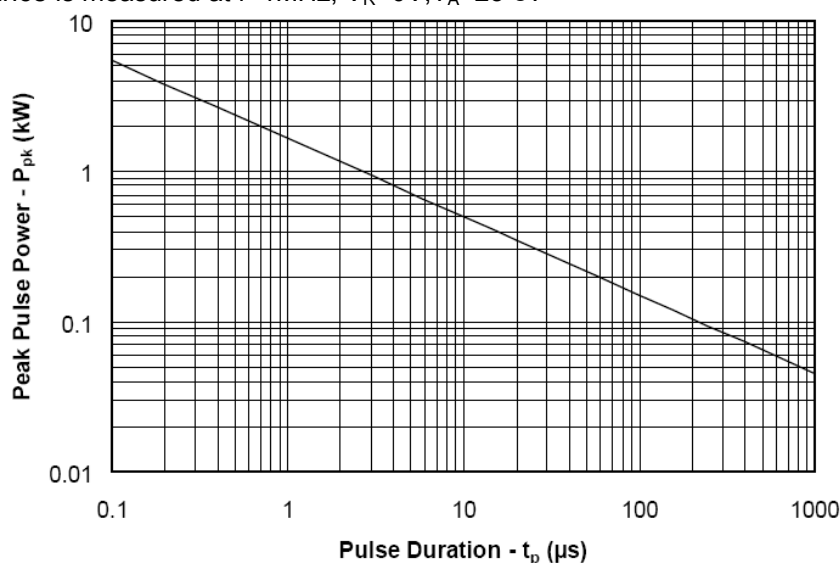


Fig.1 Non-Repetitive Peak Pulse Power vs. Pulse Time

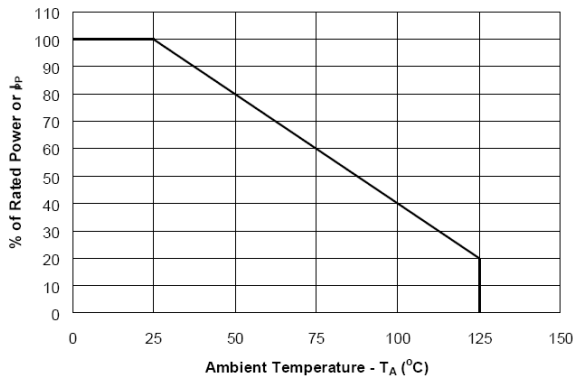


Fig.2 Power Derating Curve

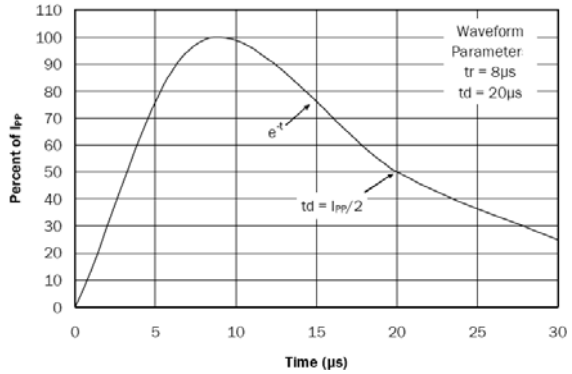


Fig.3 Waveform

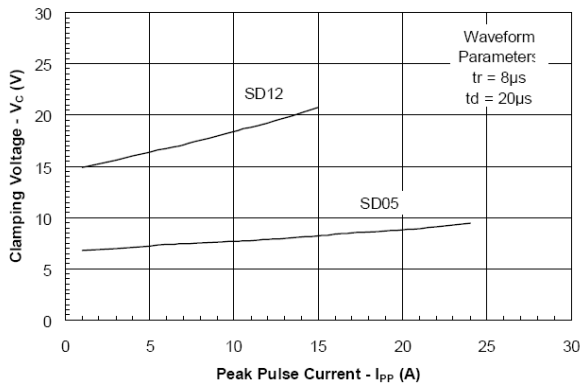


Fig.4 Clamping Voltage vs. Peak Pulse Current

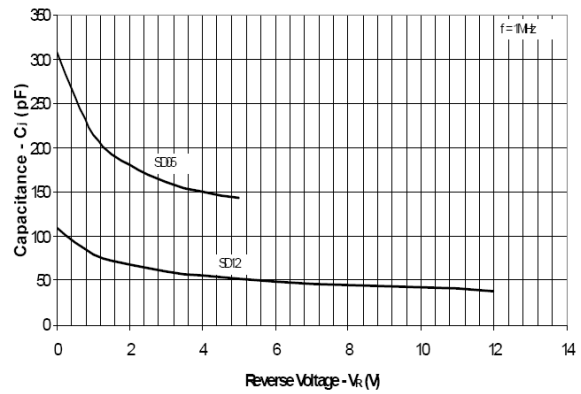


Fig.5 Capacitance vs. Reverse Voltage

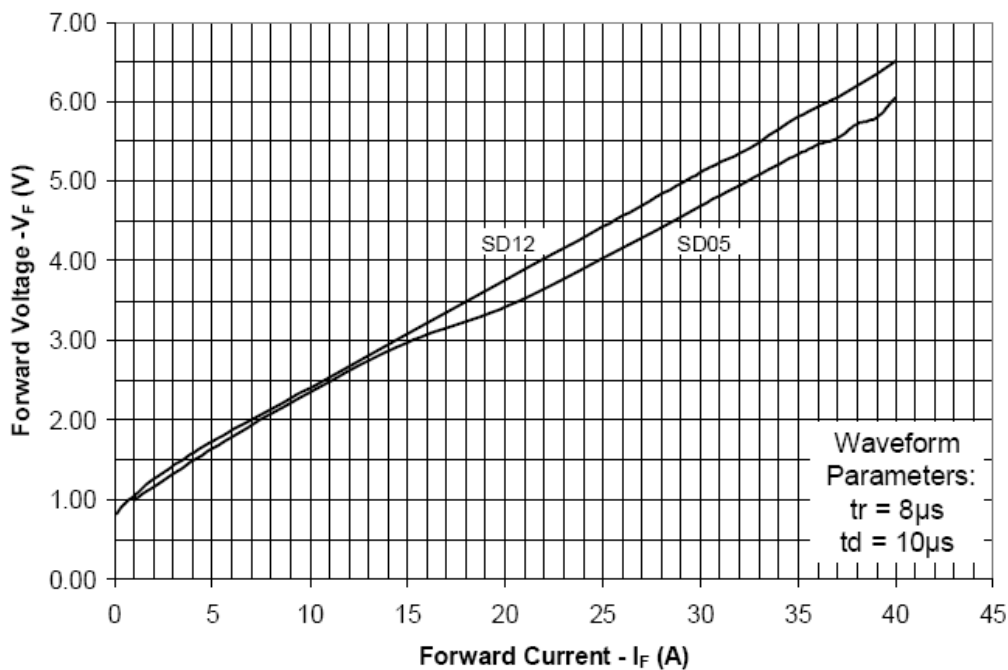
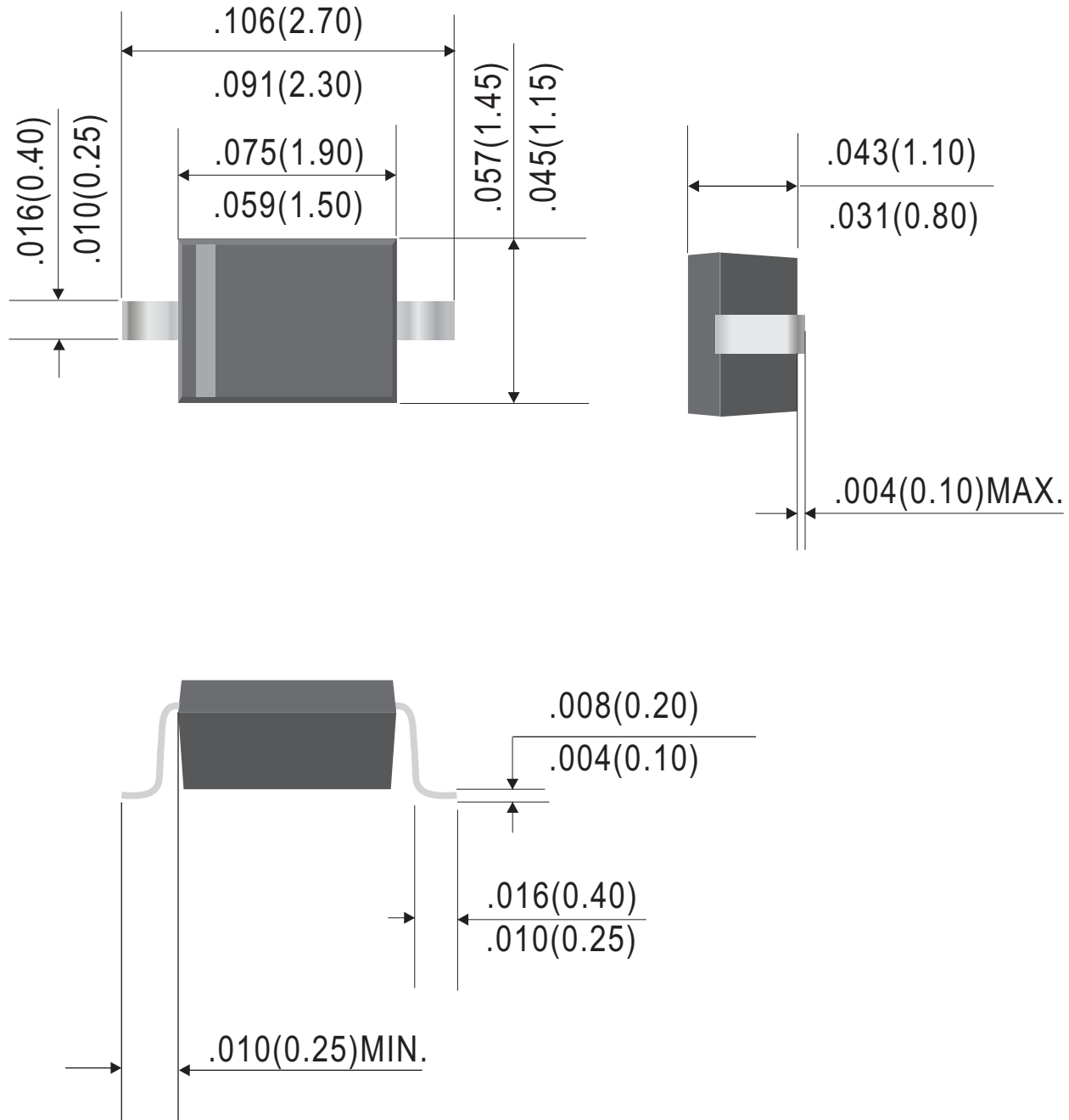


Fig.6 Forward Voltage vs. Forward Current



Outline Drawing

SOD-323



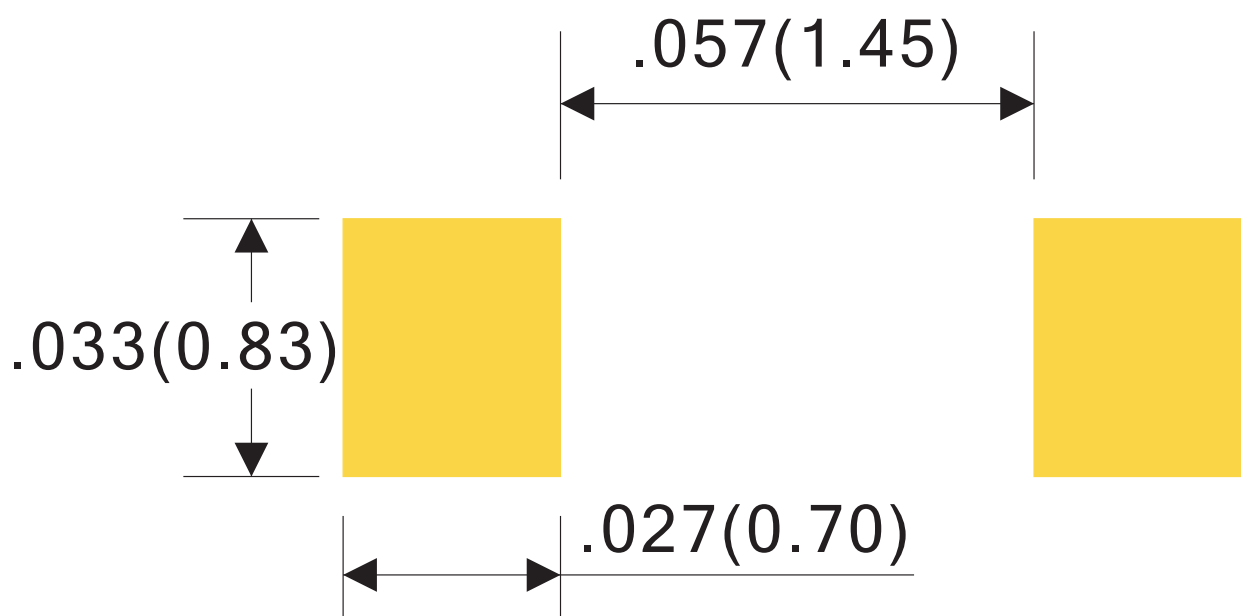
Dimensions in inches and (millimeters)

Rev.C



Suggested Soldering Pad Layout

SOD-323



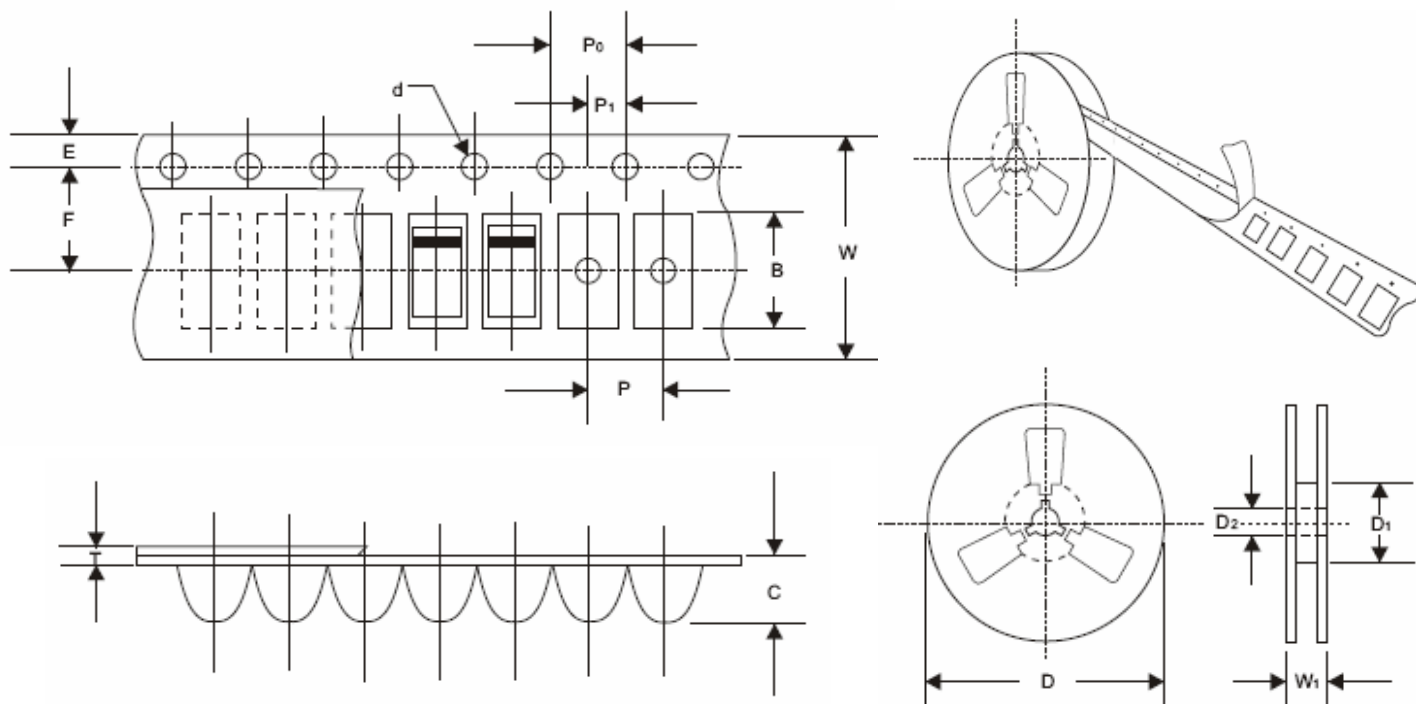
Dimensions in inches and (millimeters)

Rev.A



Reel Taping Specification - Surface Mount Device/SOD-323

PACKAGE	PER REEL EA	REEL DIA (m/m)	PER BOX EA	PER CARTION EA
SOD-323	3000	178	30000	240,000



ITEM	SYMBOL	SPECIFICATIONS(mm)		SPECIFICATIONS(inch)	
		SOD-323		SOD-323	
Carrier length	B	4.5max.		0.177max.	
Carrier depth	C	2.4max.		0.094max.	
Sprocket hole	d	1.55±0.1		0.061±0.004	
Reel outside diameter	D	178max.		7max.	
Reel inner diameter	D1	50min.		1.969min.	
Feed hole diameter	D2	13.0±0.2		0.512±0.008	
Sprocket hole position	E	1.75±0.1		0.069±0.004	
Punch hole position	F	3.5±0.05		0.1378±0.002	
Punch hole pitch	P	4.0±0.1		0.157±0.004	
Sprocket hole pitch	P0	4.0±0.1		0.157±0.004	
Embossment center	P1	2.0±0.05		0.079±0.002	
Overall tape thickness	T	0.4max.		0.016max.	
Tape width	W	8.0±0.3		0.315±0.012	
Reel width	W1	14.4max.		0.567max.	

Ordering Information:

Device PN	Marking ⁽⁴⁾	Packing
Part Number-T ⁽¹⁾ H ⁽²⁾ -WS ⁽³⁾	Page 2.	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) Packing code suffix "G" for RoHS product : Packing code Suffix "H" for halogen free product
All materials and products supplied comply with the U.S. Toxic Substances Control Act statement, PBT Chemicals

(3) Willas brand abbreviation, Label Type does not display

(4) There may be additional marking, which relates to the lot trace code information (data code and vendor code), the logo or the environmental category on the device

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