

1.Description

SDD32A36L01 is designed to protect low voltage sensitive components from ESD and transient voltage events. It is designed to protect sensitive semiconductor components from damage or upset due to electrostatic discharge (ESD), electrical fast transients (EFT), and cable discharge events (CDE).

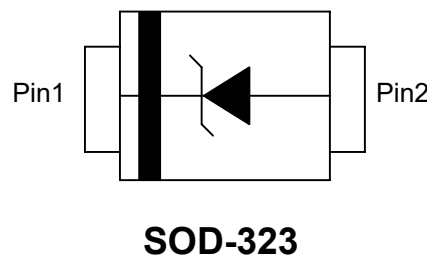
3.Features

- IEC61000-4-2 ESD 15KV Air, 8KV contact compliance
- Protects one I/O line
- Peak power dissipation of 320W under 8/20μs waveform

2.Applications

- Cellular handsets & Accessories
- Cordless phones
- Personal digital assistants (PDAs)
- Notebooks & Handhelds
- Portable instrumentation
- Digital cameras
- Peripherals
- MP3 players
- Working voltage: 36V
- Low leakage current
- Low clamping voltage
- Solder reflow temperature: Pure Tin-Sn 260~270°C

4.Pinning information





5. Absolute Maximum Ratings

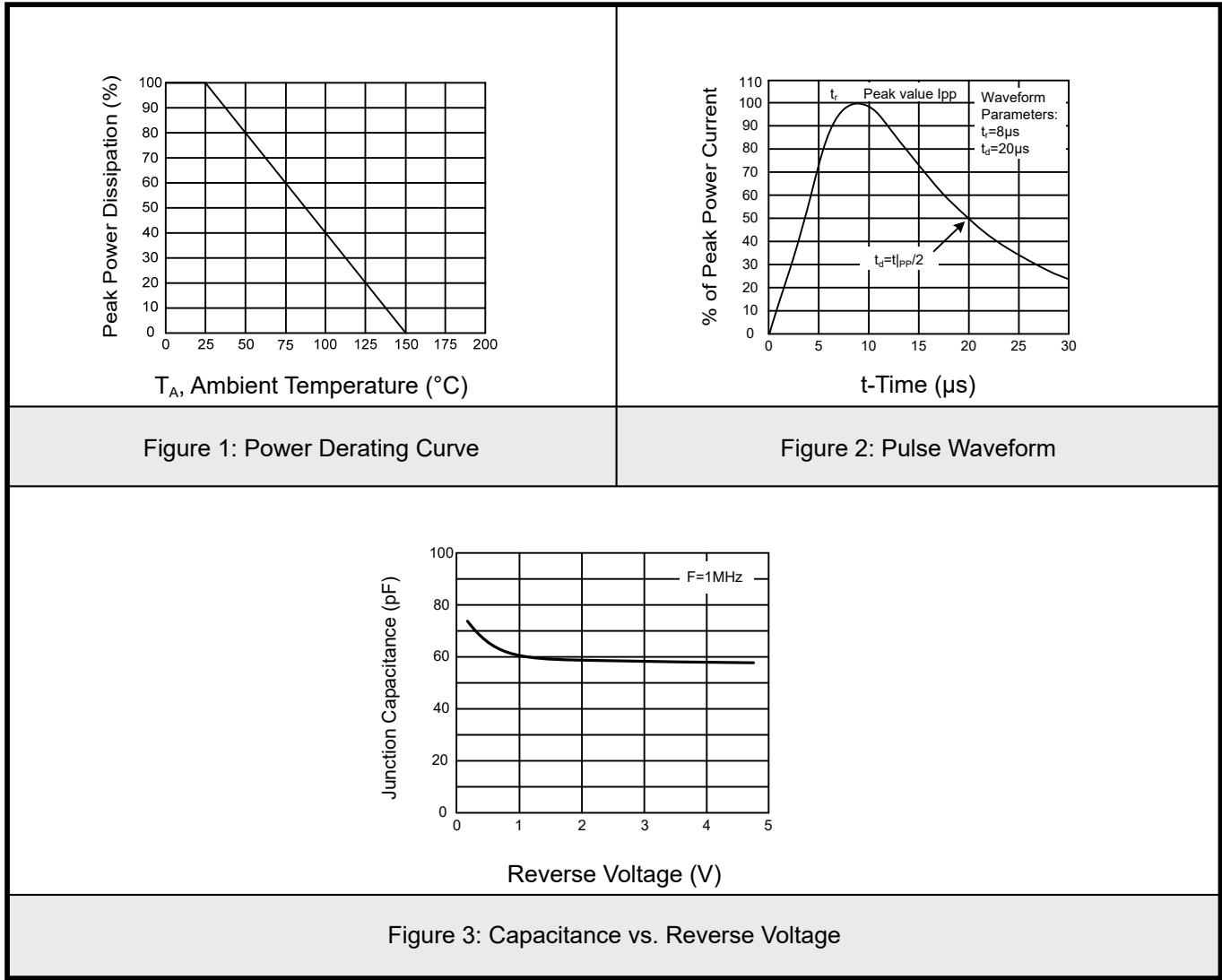
Parameter	Symbol	Maximum	Units
Peak pulse power (tp=8/20us waveform)	P_{PP}	320	W
ESD voltage (Contact discharge)	V_{ESD}	±8	kV
ESD voltage (Air discharge)		±15	kV
Storage & Junction temperature range	T_{STG}, T_J	-55 to 150	°C

6. Electrical Characteristics ($T_J=25^{\circ}\text{C}$)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse stand-off voltage	V_{RWM}				36	V
Reverse breakdown voltage	V_{BR}	$I_{BR}=1\text{mA}$	40			V
Reverse leakage current	I_R	$V_R=36\text{V}$			1	μA
Clamping voltage (tp=8/20us)	V_C	$I_{PP}=1\text{A}$			51	V
Clamping voltage (tp=8/20us)	V_C	$I_{PP}=3\text{A}$			75	V
Peak pulse current (tp=8/20us)	I_{PP}				3	A
Off state junction capacitance	C_J	0Vdc, f=1MHz		70		pF



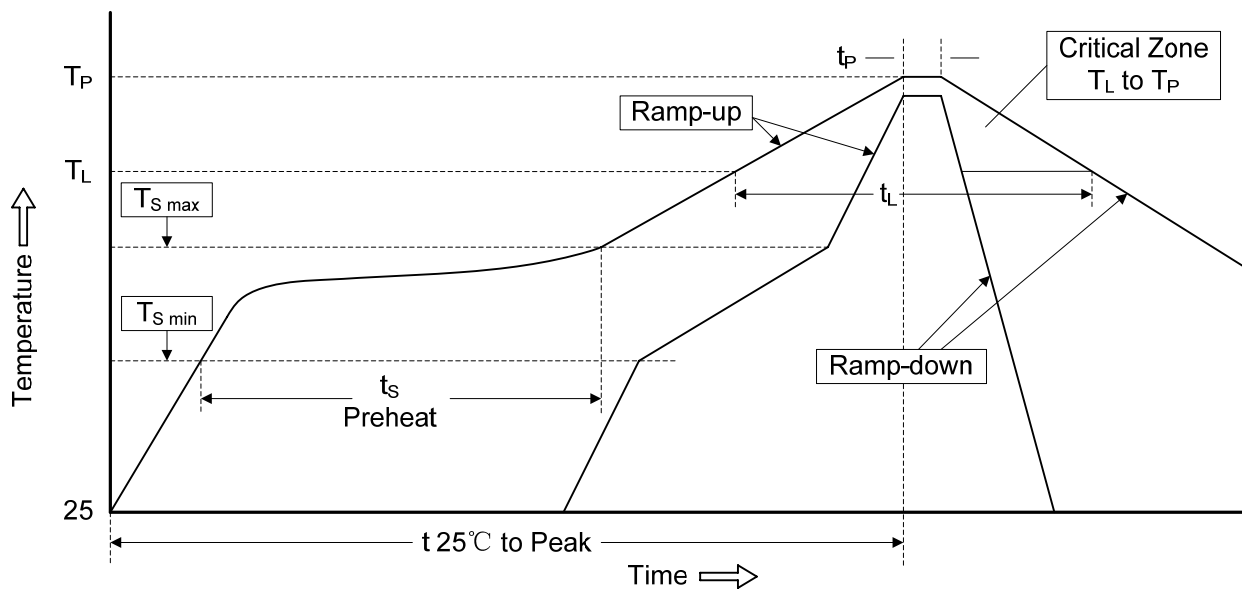
7. Typical characteristic





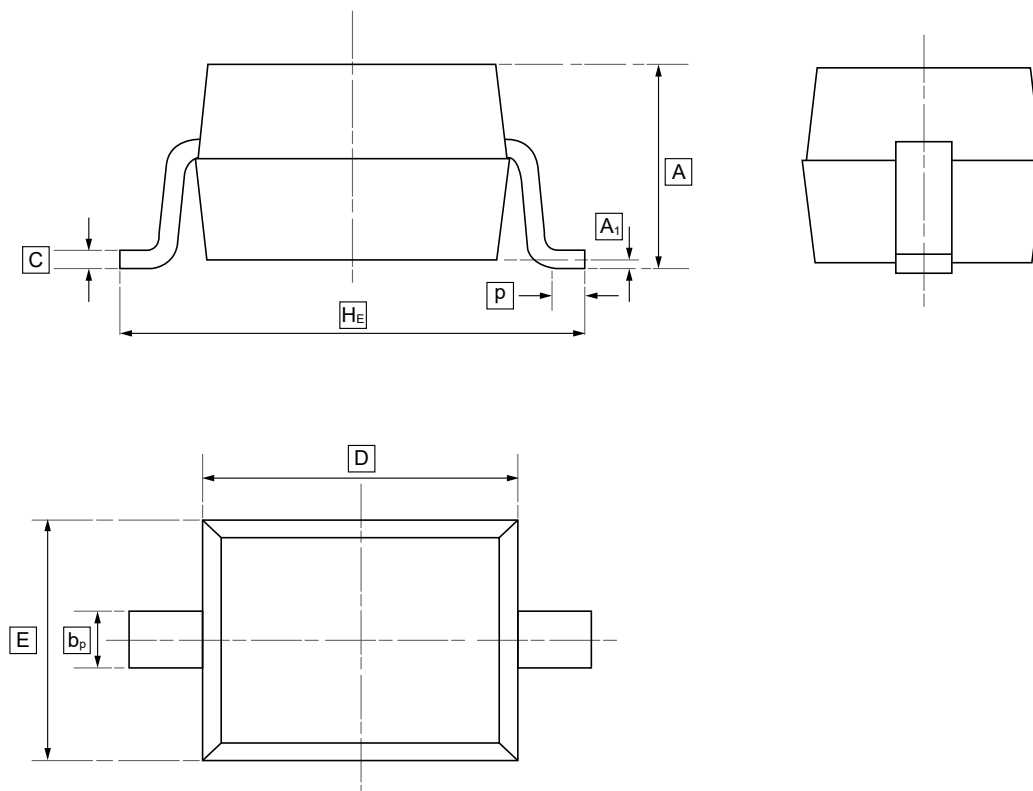
8.Recommended Soldering Conditions

Profile Feature		Pb-Free Assembly
Average ramp-up rate (T_L to T_P)		3°C/second max.
PreHeat	-Temperature Min ($T_{s(min)}$)	150°C
	-Temperature Max ($T_{s(max)}$)	200°C
	-Time (Min to Max) (t_s)	60-180 secs.
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max
Time maintained above	-Temperature (T_L)	217°C
	-Time (T_L)	60-150 secs.
Peak Temperature (T_P)		260°C
Time within 5°C of actual Peak Temperature (T_P)		20-40 seconds
Ramp-down Rate		6°C/sec. Max
Time 25°C to Peak Temperature		8 min. Max





9.SOD-323 Package Outline Dimensions



DIMENSIONS (mm are the original dimensions)

Symbol	A	b_p	C	D	E	H_E	A_1	P
Min	0.90	0.25	0.10	1.60	1.15	2.30	0.01	0.20
Max	1.20	0.40	0.15	1.80	1.35	2.80	0.10	0.50



10.Ordering information



ww: Batch Code

Order Code	Package	Base QTY	Delivery Mode
UMW SDD32A36L01	SOD-323	3000	Tape and reel



11.Disclaimer

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