

1.Features

- 550W peak pulse power ($t_p = 8/20\mu s$)
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- IEC 61000-4-2 $\pm 30kV$ contact $\pm 30kV$ air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 30A (8/20 μs)

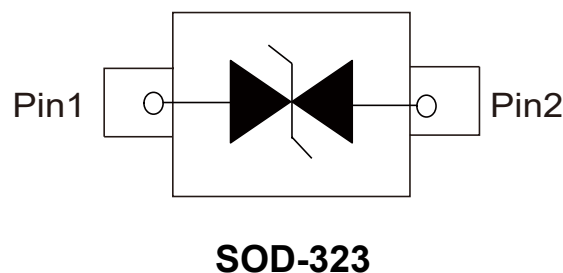
2.Applications

- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Pagers Peripherals

3.Mechanical Data

- SOD323 package
- Molding compound flammability rating: UL94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

4.Pinning information





5. Absolute Maximum Ratings $T_A = 25^\circ\text{C}$

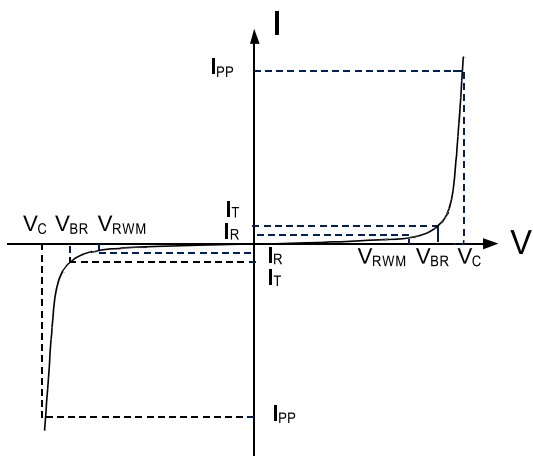
Parameter	Symbol	Maximum	Units
Peak Pulse Power ($t_p = 8/20\mu\text{s}$)	P_{PP}	550	W
Peak Pulse Current ($t_p = 8/20\mu\text{s}$) (note1)	I_{PP}	30	A
ESD per IEC 61000-4-2 (Air)	V_{ESD}	30	kV
ESD per IEC 61000-4-2 (Contact)		30	kV
Lead Soldering Temperature	T_L	260	$^\circ\text{C}$
Junction Temperature	T_J	-55 to 150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 to 150	$^\circ\text{C}$



6. Electrical Characteristic ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	6			V
Reverse Leakage Current	I_R	$V_{RWM}=5\text{V}$, $T=25^\circ\text{C}$			1	μA
Clamping Voltage	V_C	$I_{PP}=30\text{A}$, $t_p=8/20\mu\text{s}$		15		V
Junction Capacitance	C_J	$V_R=0\text{V}$, $f=1\text{MHz}$		140		pF

7. Electrical Parameters ($T_A=25^\circ\text{C}$ unless otherwise noted)

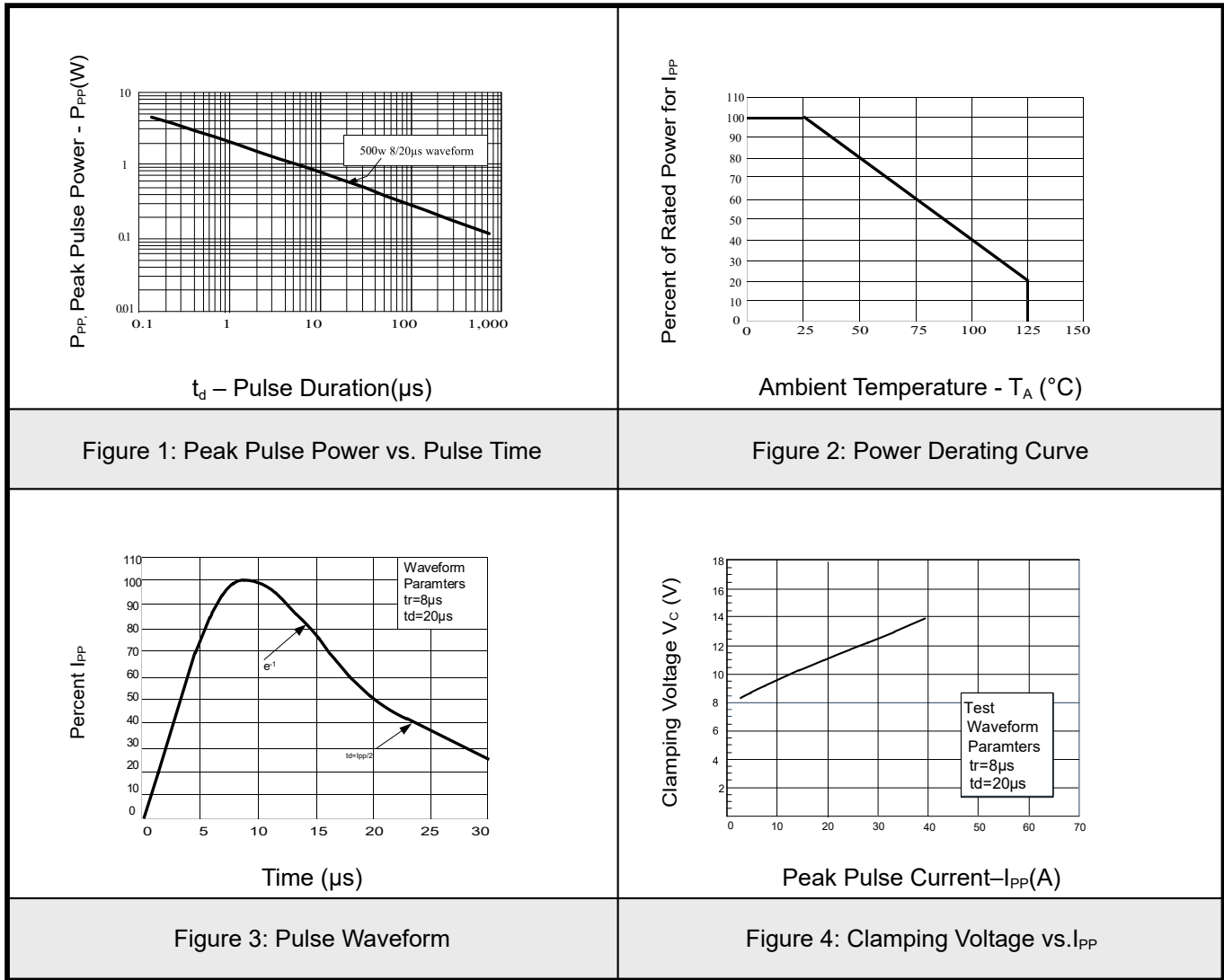


Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current

Notes: 8/20 μs pulse waveform.

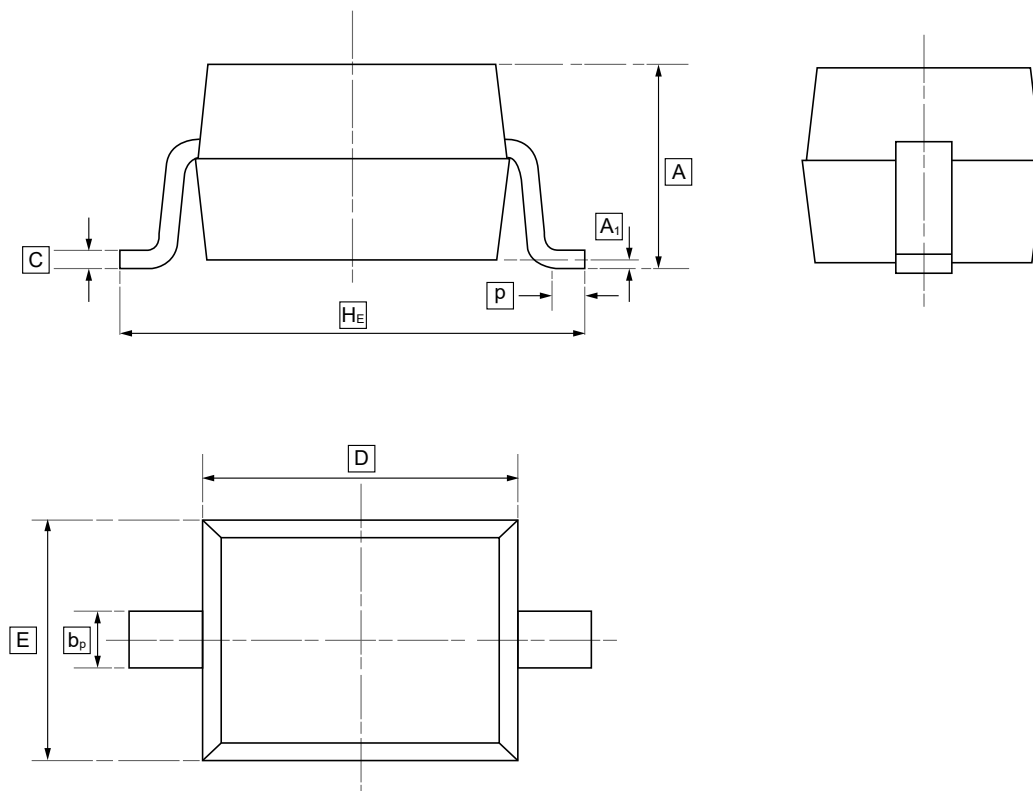


8. Typical characteristic





9.SOD-323 Package Outline Dimensions

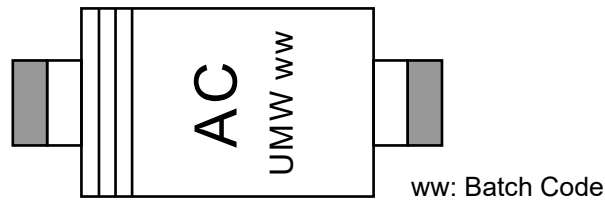


DIMENSIONS (mm are the original dimensions)

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



Order Code	Package	Base QTY	Delivery Mode
UMW PESD5V0L1BA	SOD-323	3000	Tape and reel



11.Disclaimer

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