

1.Features

- 90Watts peak pulse power ($t_p=8/20\mu s$)
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current

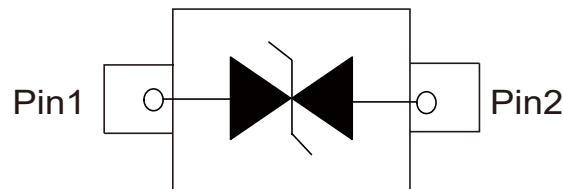
3.Mechanical Data

- SOD523 package
- Molding compound flammability rating: UL94V-0

2.Applications

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

4.Pinning information



SOD-523



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

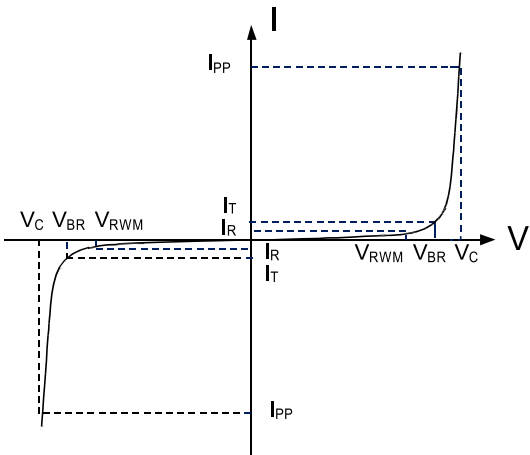
Parameter	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu\text{s}$)	P_{PP}	90	Watts
Peak Pulse Current ($t_p=8/20\mu\text{s}$) (note1)	I_{PP}	8	A
ESD per IEC 61000-4-2 (Air)	V_{ESD}	25	kV
ESD per IEC 61000-4-2 (Contact)		25	kV
Lead Soldering Temperature	T_L	260(10seconds)	$^\circ\text{C}$
Junction 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°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 =1mA	6			V
Reverse Leakage Current	I _R	V _{RWM} =5V, T=25°C			0.2	μA
Clamping Voltage	V _C	I _{PP} =8A, t _p =8/20μs		11	15	V
Junction Capacitance	C _J	V _R =0V, f=1MHz		18	23	pF

7.Electrical Parameters (T_A=25°C unless otherwise noted)

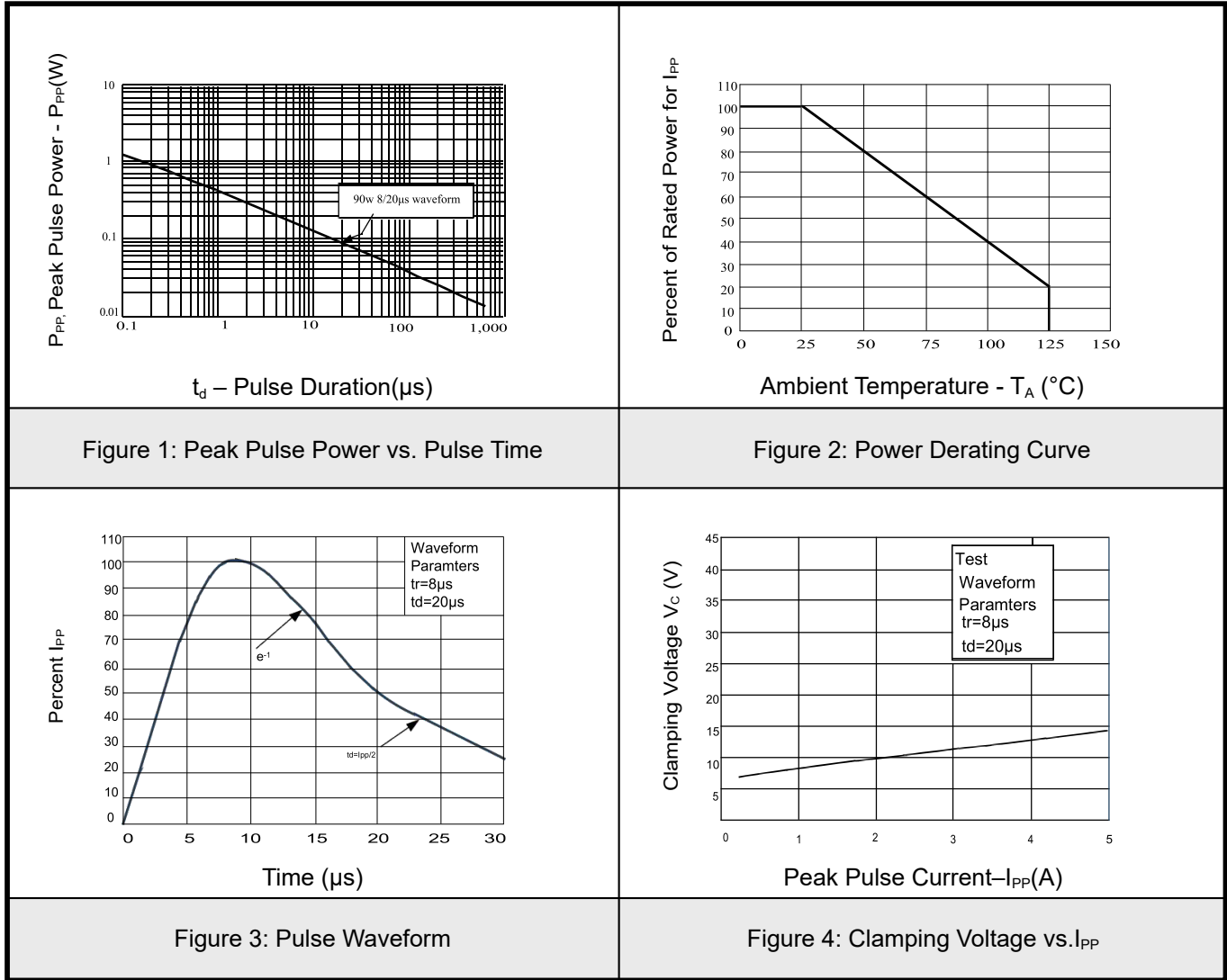


Symbol	Parameter
I _{PP}	Maximum Reverse Peak Pulse Current
V _C	Clamping Voltage @ I _{PP}
V _{RWM}	Working Peak Reverse Voltage
I _R	Maximum Reverse Leakage Current @ V _{RWM}
V _{BR}	Breakdown Voltage @ I _T
I _T	Test Current

Notes: 8/20μs pulse waveform.

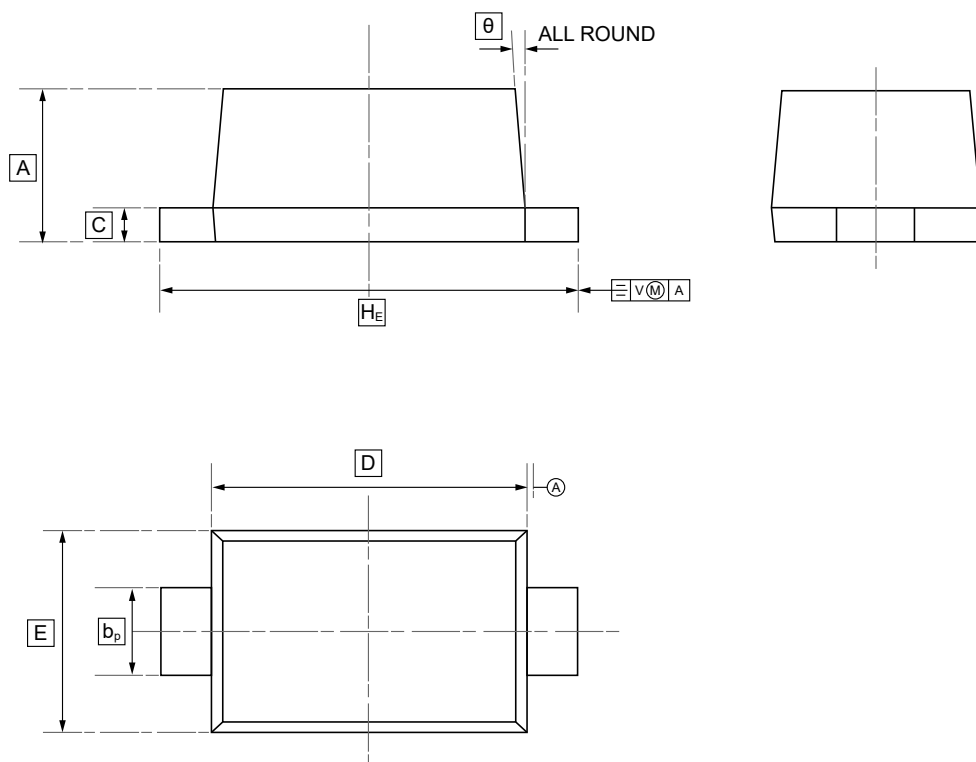


8. Typical characteristic





9.SOD-523 Package Outline Dimensions

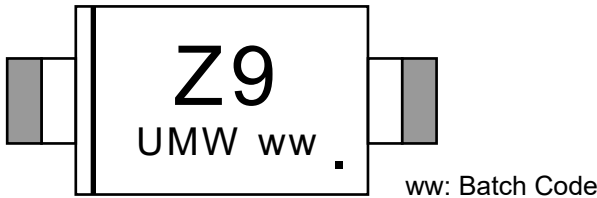


DIMENSIONS (mm are the original dimensions)

Symbol	A	b _p	C	D	E	H _E	θ
Min	0.58	0.3	0.100	1.15	0.75	1.5	5°
Max	0.68	0.4	0.135	1.25	0.85	1.7	



10.Ordering information



Order Code	Package	Base QTY	Delivery Mode
UMW PESD5V0V1BB	SOD-523	3000	Tape and reel



11.Disclaimer

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