

1.Features

- 250Watts peak pulse power ($t_p=8/20\mu s$)
- Unidirectional 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) 15A(8/20 μs)

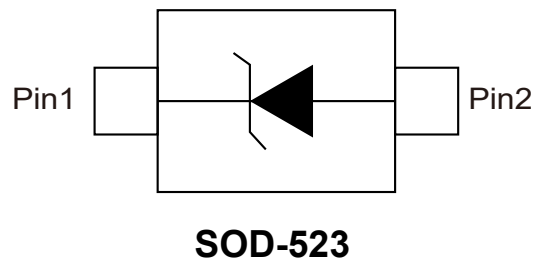
2.Applications

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

3.Mechanical Data

- SOD-523 package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

4.Pinning information





5. Absolute Maximum Ratings

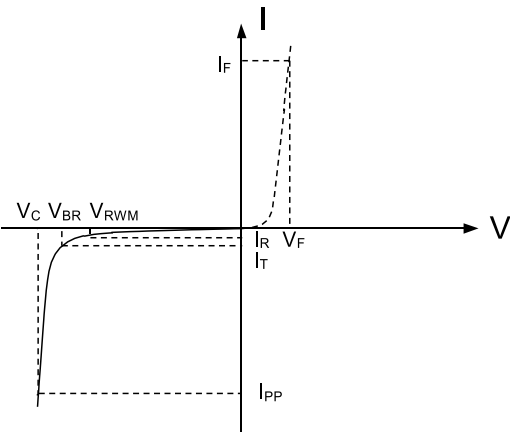
Parameter	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu s$)	P_{PP}	250	Watts
Peak Pulse Current ($t_p=8/20\mu s$)(note1)	I_{PP}	15	A
ESD per IEC 61000-4-2(Air)	V_{ESD}	30	kV
ESD per IEC 61000-4-2(Contact)		30	kV
Lead Soldering Temperature	T_L	260(10seconds)	°C
Junction Temperature	T_J	-55 to 150	°C
Storage Temperature	T_{STG}	-55 to 150	°C



6.Electrical Characteristics

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	$V_{RWM}=5V, T=25^{\circ}C$			0.5	μA
Clamping Voltage	V_C	$I_{PP}=15A, t_p=8/20\mu s$		12	18	V
Junction capacitance	C_J	$V_R=0V, f=1MHz$		80		pF

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

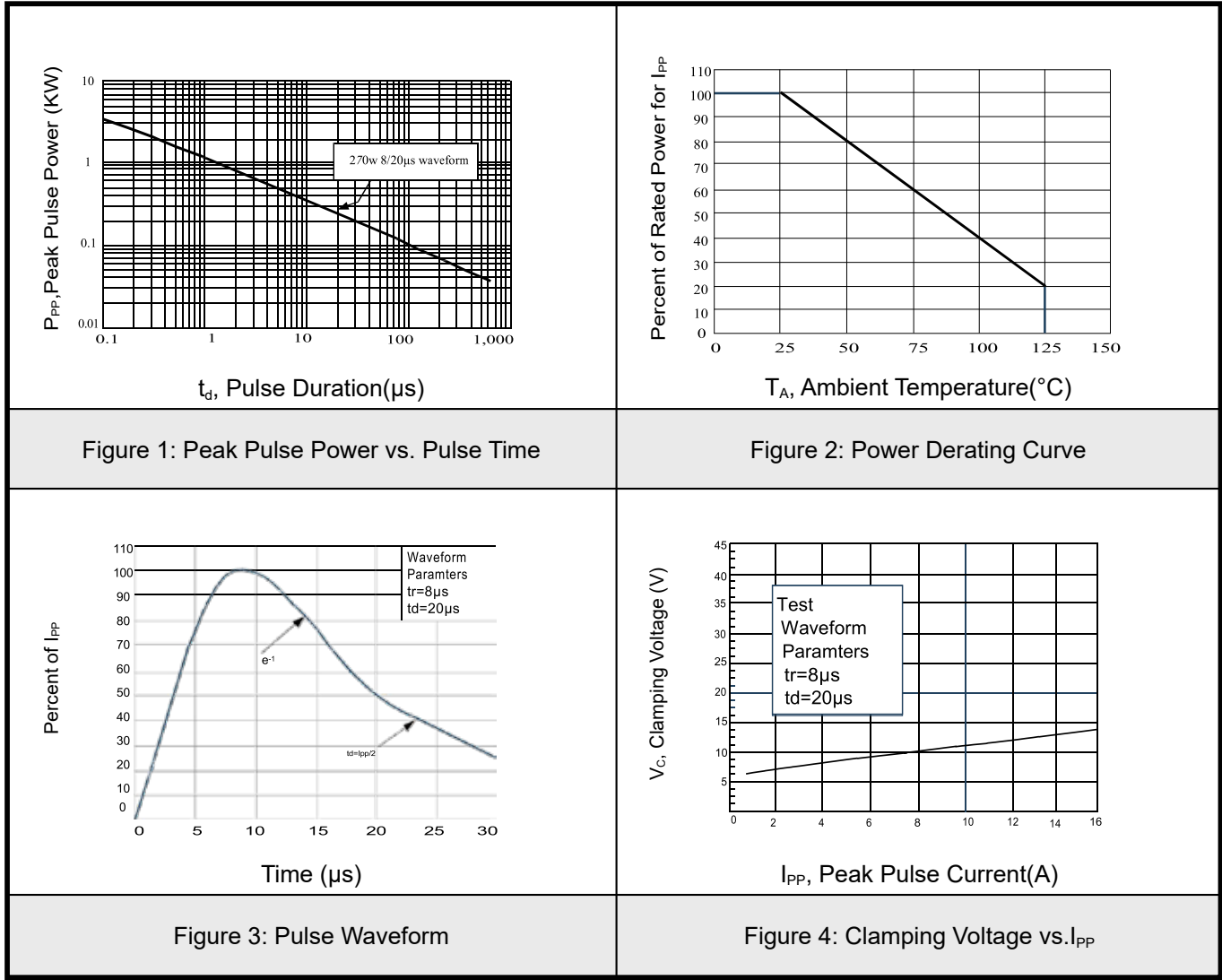


Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current

Notes: 8/20 μs pulse waveform.

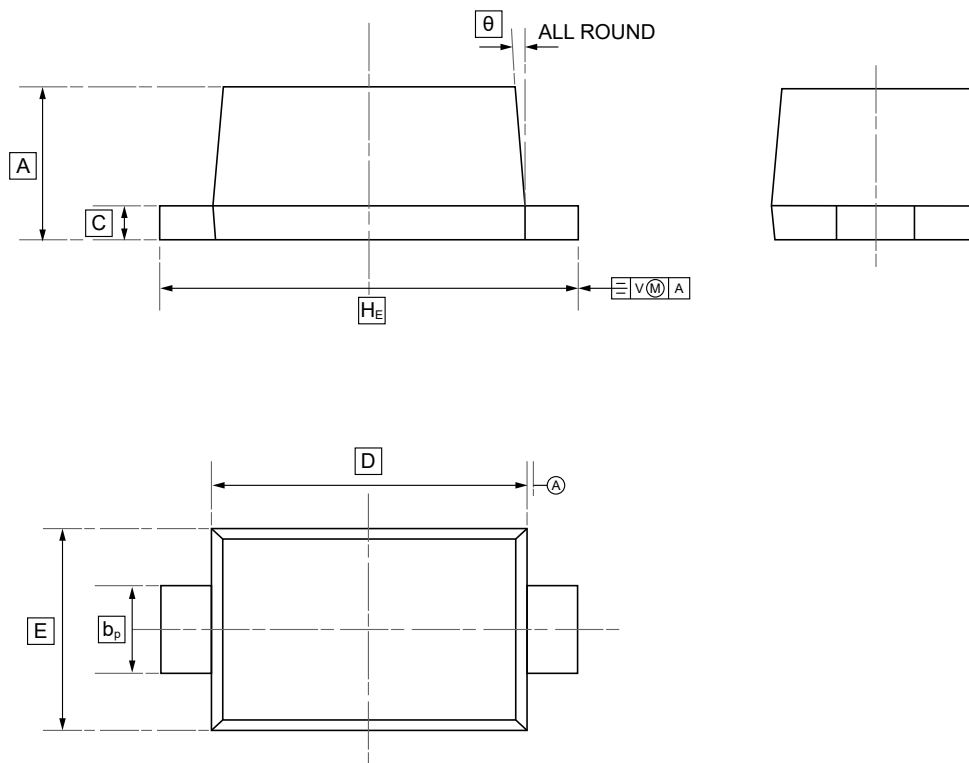


8. Typical characteristic





9.SOD-523 Package Outline Dimensions

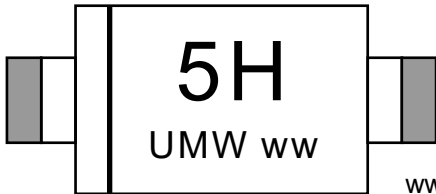


DIMENSIONS (mm are the original dimensions)

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



ww: Batch Code

Order Code	Package	Base QTY	Delivery Mode
UMW UCLAMP0501H	SOD-523	3000	Tape and reel



11.Disclaimer

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