

1.Features

- 40Watts peak pulse power ($t_p=8/20\mu s$)
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Low capacitance ($C_j=2.7pF$ typ.)
- Protection one data/power line
- IEC 61000-4-2 $\pm 10kV$ contact $\pm 15kV$ air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 3.0A (8/20 μs)

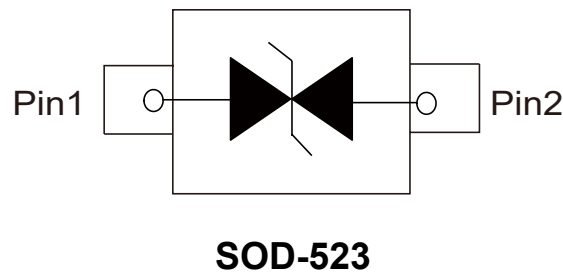
2.Applications

- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation

3.Mechanical Data

- SOD523 package
- Molding compound flammability rating: UL
- 94V-0 Packaging: Tape and Reel
- RoHS/WEEE Compliant

4.Pinning information





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

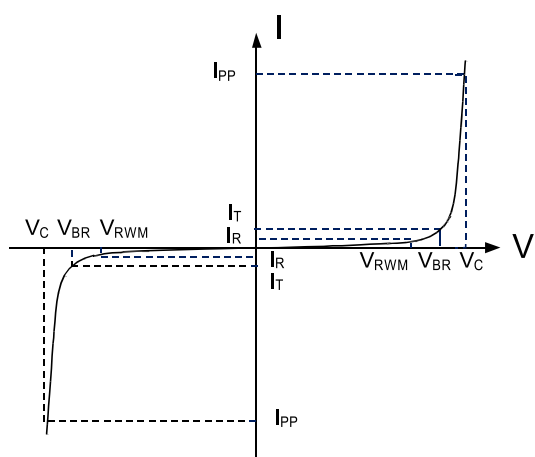
Parameter	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu\text{s}$)	P_{PP}	40	Watts
Peak Pulse Current ($t_p = 8/20\mu\text{s}$) (note1)	I_{PP}	3	A
ESD per IEC 61000-4-2 (Air)	V_{ESD}	15	kV
ESD per IEC 61000-4-2 (Contact)		10	kV
Lead Soldering Temperature	T_L	260(10seconds)	$^\circ\text{C}$
Junction Temperature	T_J	-55 to 125	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 to 125	$^\circ\text{C}$



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}	$I_T=1\text{mA}$	5.5	6.5		V
Reverse Leakage Current	I_R	$V_{RWM}=5\text{V}$, $T=25^\circ\text{C}$			0.1	μA
Peak Pulse Current	I_{PP}	$t_p=8/20\mu\text{s}$			3	A
Clamping Voltage	V_C	$I_{PP}=3\text{A}$, $t_p=8/20\mu\text{s}$			13	V
Junction Capacitance	C_J	$V_R=0\text{V}$, $f=1\text{MHz}$		2.7	3.5	pF

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

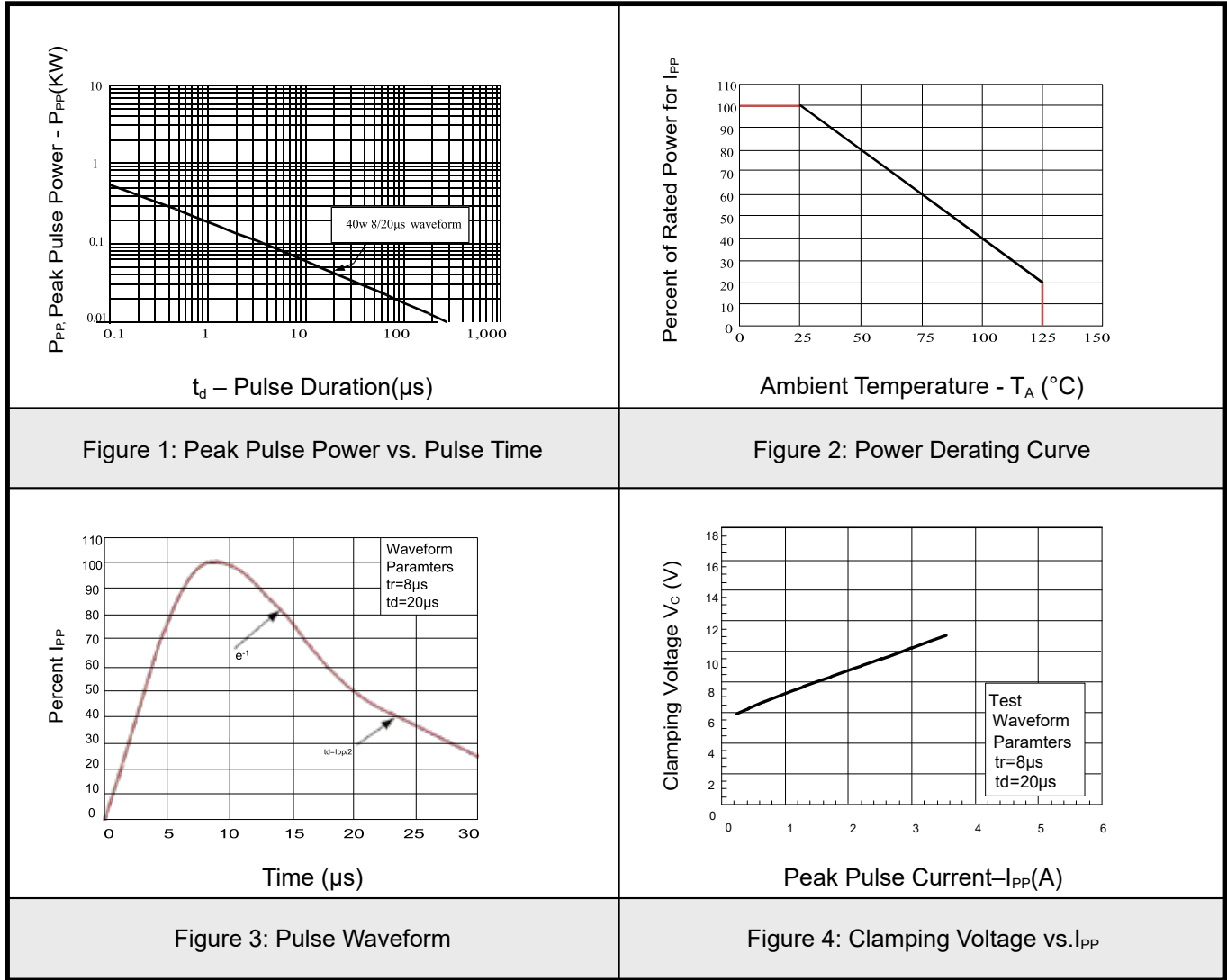


Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current

Notes: 8/20 μs pulse waveform.

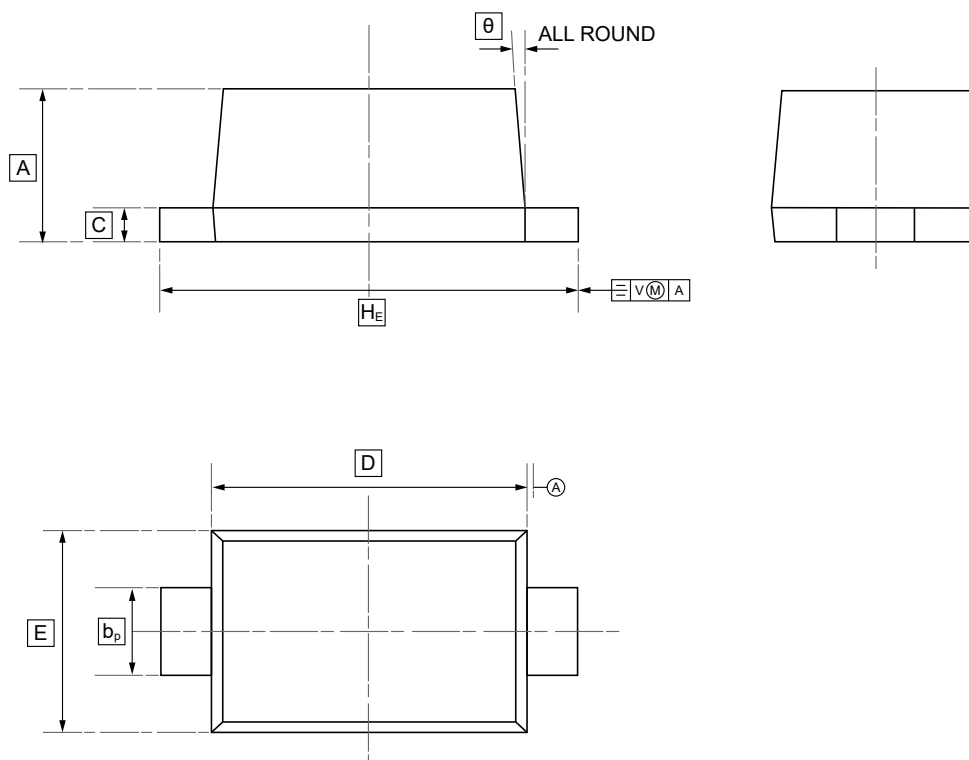


8. Typical characteristic





9.SOD-523 Package Outline Dimensions

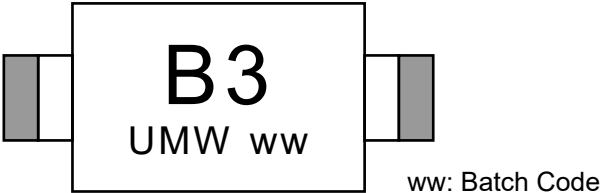


DIMENSIONS (mm are the original dimensions)

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 PESD5V0U1BB	SOD-523	3000	Tape and reel



11.Disclaimer

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