

1.Features

- 100 Watts Peak Pulse Power per Line
($t_p=8/20\mu s$)
- Replacement for MLV (0603)
- Protects one I/O or power line
- Low Clamping Voltage
- Working Voltage: 05V
- Low Leakage Current
- Response Time is Typically < 1ns

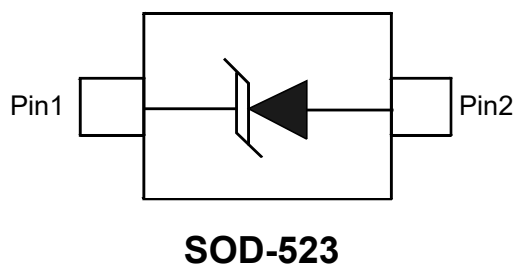
2.Applications

- Cellular Handsets & Accessories
- Personal Digital Assistants (PDAs)
- Notebooks & Handhelds
- Portable Instrumentation
- Digital Cameras
- MP3 players

3.IEC Compatibility(EN61000-4)

- IEC 61000-4-2 (ESD) $\pm 15kV$ (air), $\pm 8kV$ (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 8A (8/20 μs)

4.Pinning information





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

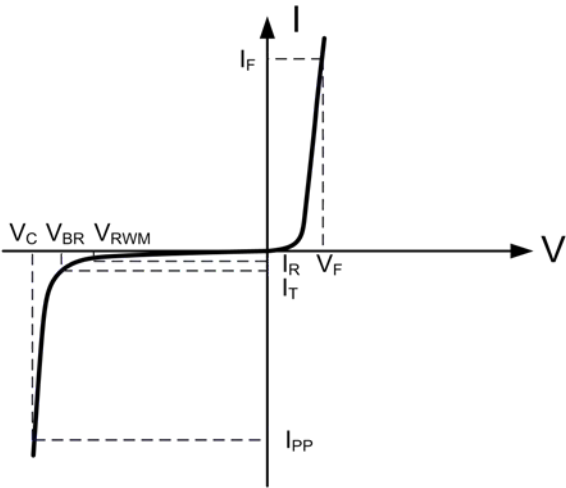
Parameter	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu\text{s}$)	P_{PP}	100	Watts
Peak Forward Voltage ($I_F=1\text{A}$, $t_p=8/20\mu\text{s}$)	V_{FP}	1.4	V
Junction Temperature	T_J	-55 to 125	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 to 150	$^\circ\text{C}$



6.Electrical Characteristics

Part Number	Reverse Stand off Voltage	Minimum Breakdown Voltage	Maximum Clamping Voltage	Maximum Peak Pulse Current	Maximum Reverse Leakage current	Typical Capacitance D _c =0V
	V _{RWM}	V _{BR} @1mA	V _C @I _{PP}	I _{PP}	I _R @V _{RWM}	C _J @ 1MHz
	(Volts)	(Volts)	(Volts)	(Amps)	(μA)	(pF)
BSD5A051V	05	6	12	8	1	30

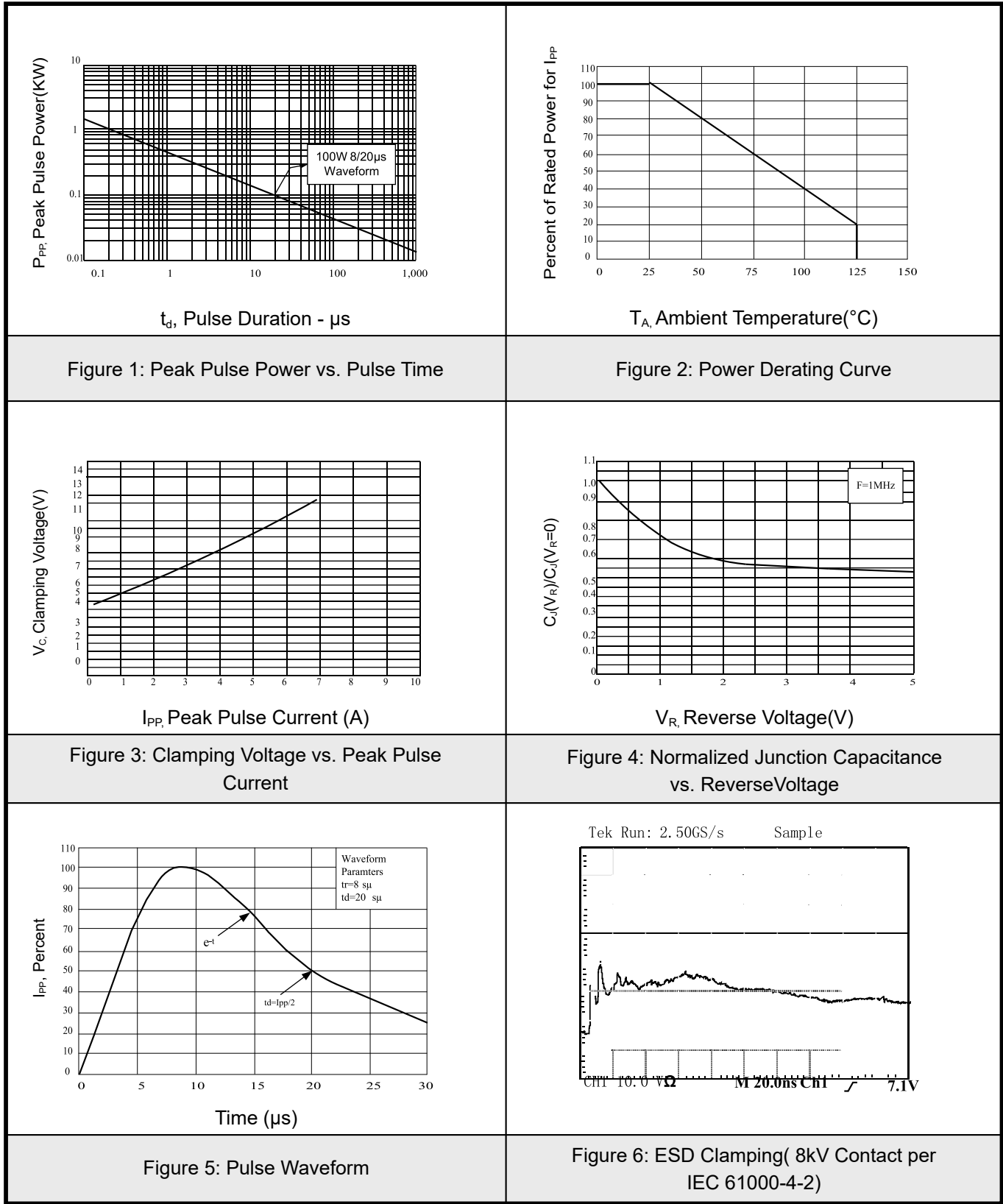
7.Electrical Parameters (T=25°C)



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
I _F	Forward Current
V _F	Forward Voltage @ I _F

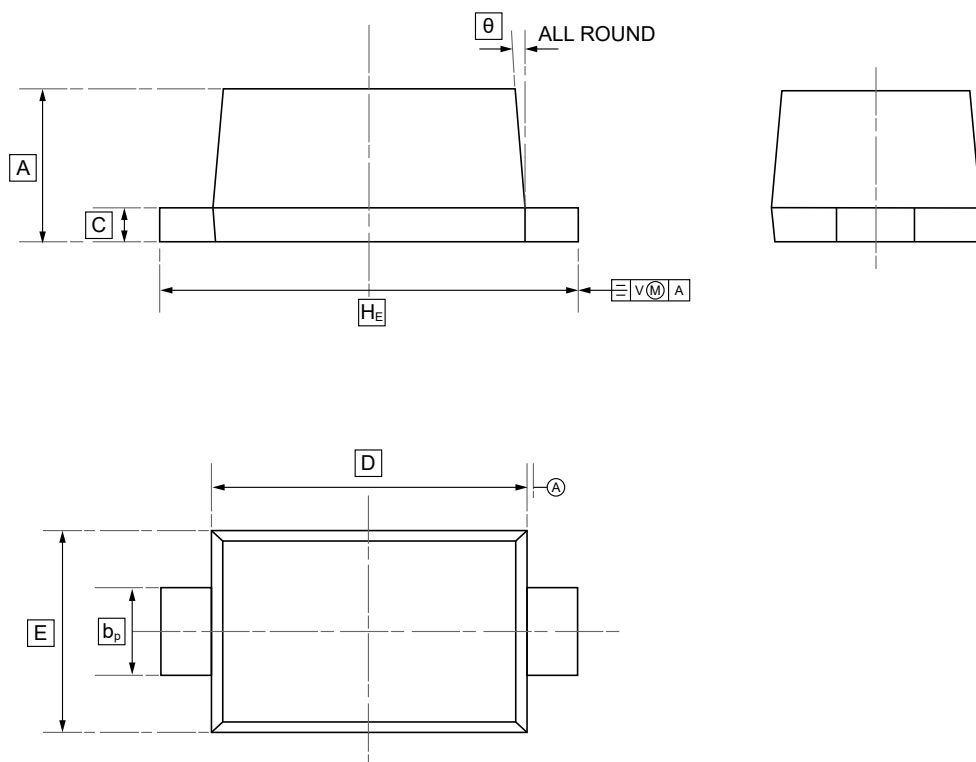


8. Typical characteristic





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 BSD5A051V	SOD-523	3000	Tape and reel



11.Disclaimer

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