

UMW BSD5A051V

1.Features

- 100 Watts Peak Pulse Power per Line (t_p=8/20µs)
- 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

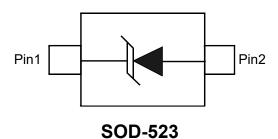
- Portable Instrumentation
- Digital Cameras
- MP3 players

3.IEC Compatibility(EN61000-4)

- IEC 61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)

■ IEC 61000-4-5 (Lightning) 8A (8/20µs)

4.Pinning information









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

Parameter	Symbol	Value	Units
Peak Pulse Power (t _p =8/20μs)	P _{PP}	100	Watts
Peak Forward Voltage (I _ε =1A, t _ρ =8/20μs)	V _{FP}	1.4	V
Junction Temperature	TJ	-55 to 125	°C
Storage Temperature	T _{STG}	-55 to 150	°C

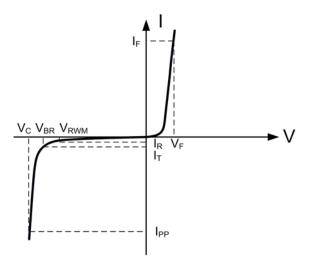






Part Number	Reverse Stand off Voltage	Minimum Breakdown Voltage	Maximum Clamping Voltage	Maximum Peak Pulse Current	Maximum Reverse Leakage current	Typical Capacitance D _c =0V
	V_{RWM}	V _{BR} @1mA	V _C @I _{PP}	I _{PP}	I _R @V _{RWM}	C _J @ 1MHz
	(Volts)	(Volts)	(Volts)	(Amps)	(μΑ)	(pF)
BSD5A051V	05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

7.Electrical Parameters (T=25°C)



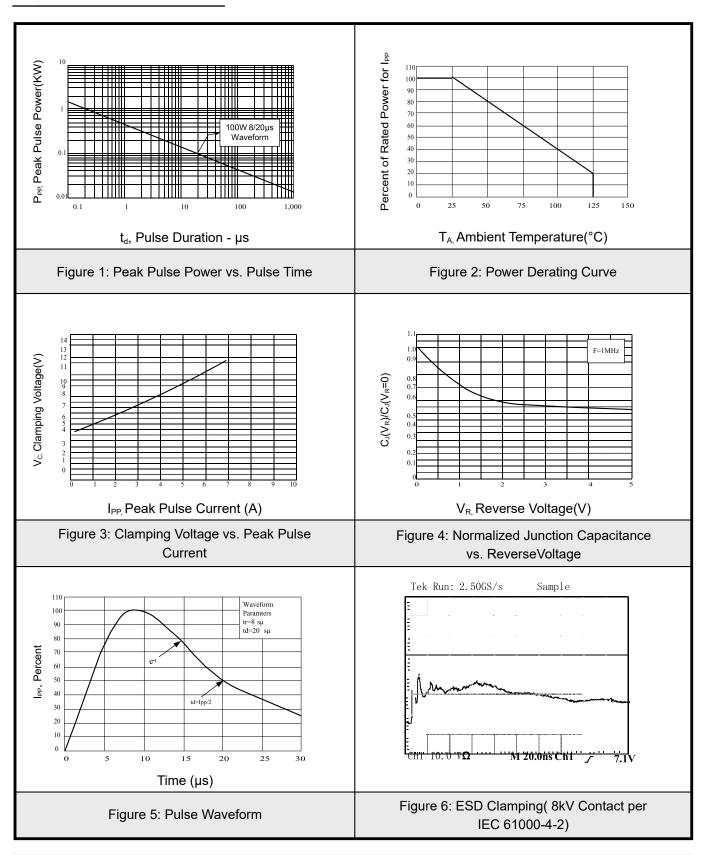
Symbol	Parameter			
I _{PP}	Maximum Reverse Peak Pulse Current			
Vc	Clamping Voltage @ I _{PP}			
V_{RWM}	Working Peak Reverse Voltage			
I _R	Maximum Reverse Leakage Current @ V _{RWM}			
V _{BR}	Breakdown Voltage @ I _⊤			
I _T	Test Current			
I _F	Forward Current			
V _F	Forward Voltage @ I _F			







8. Typical characteristic

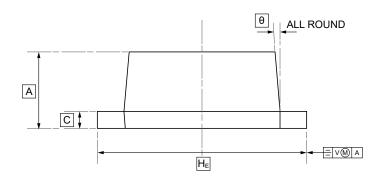


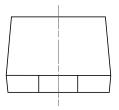


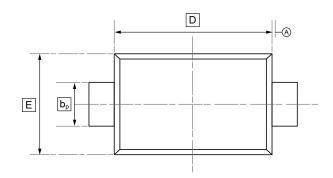




9.SOD-523 Package Outline Dimensions







DIMENSIONS (mm are the original dimensions)

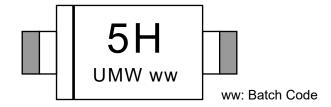
Symbol	Α	b p	С	D	E	H _E	θ
Min	0.58	0.3	0.100	1.15	0.75	1.5	5°
Max	0.68	0.4	0.135	1.25	0.85	1.7	่ว







10.Ordering information



Order Code	Package	Base QTY	Delivery Mode
UMW BSD5A051V	SOD-523	3000	Tape and reel

UMW BSD3A031V







11.Disclaimer

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