UMW PESD5V0L2BT

1.Features

- 350W peak pulse power (t_p=8/20μs)
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- IEC 61000-4-2 ±30kV contact ±30kV air
- IEC 61000-4-4 (EFT) 40A(5/50ns)
- IEC 61000-4-5(Lightning) 17A(8/20μs)

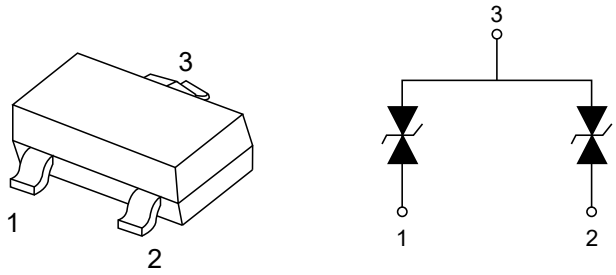
2.Applications

- Dataline
- Automatic Teller Machines
- Net works
- Power line

3.Mechanical Data

- SOT-23 package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

4.Pinning information



SOT-23

5.Absolute Maximum Ratings

Parameter	Symbol	Value	Units
Peak Pulse Power (t_p=8/20μs)	P_{PP}	350	W
Peak Pulse Current (t_p=8/20μs)(note1)	I_{PP}	17	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	260/10S	°C
Junction Temperature	T_J	-55 to 125	°C
Storage Temperature	T_{STG}	-55 to 125	°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	7.2	8.5	V
Reverse Leakage Current	I_R	V_{RWM}=5V, T=25°C		0.1	0.5	μA
Peak Pulse Current	I_{PP}	t_p=8/20μs			17	A
Clamping Voltage	V_C	I_{PP}=17A, t_p=8/20μs			20	V
Junction capacitance	C_J	V_R=0V, f=1MHz(Pin1 Pin2 to Pin 3)		65	75	pF

7.Typical characteristic

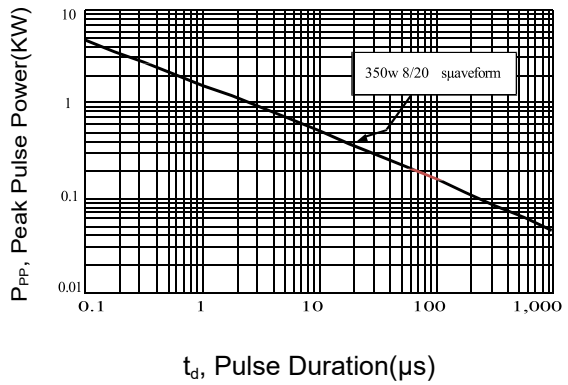


Figure 1: Peak Pulse Power vs. Pulse Time

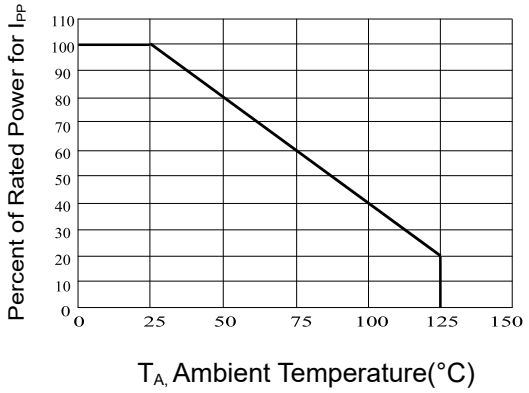


Figure 2: Power Derating Curve

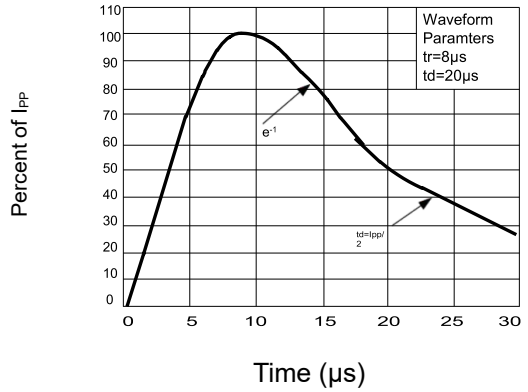


Figure 3: Pulse Waveform

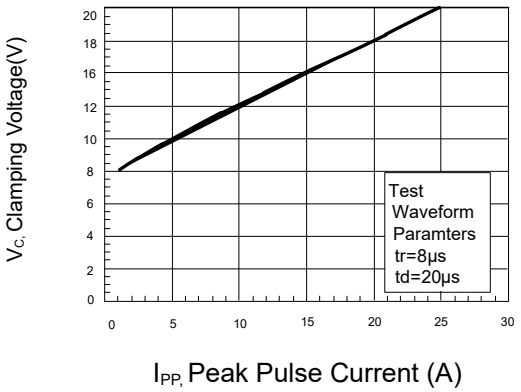
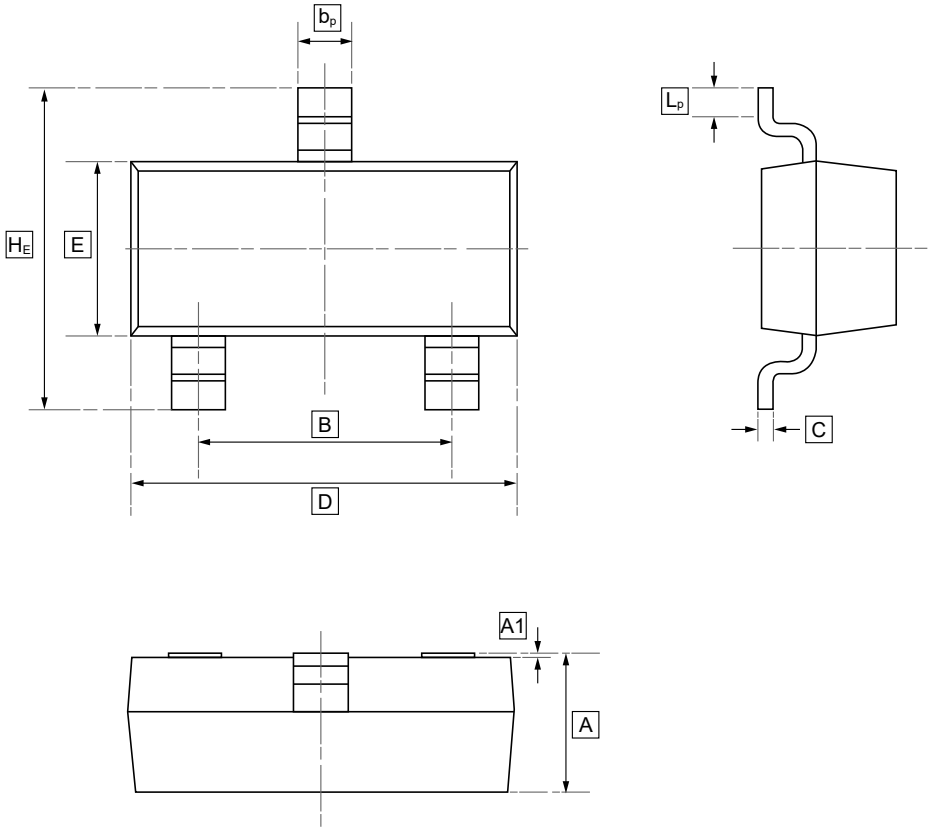


Figure 4: Clamping Voltage vs.I_{PP}

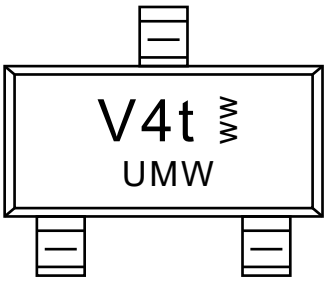
8.SOT-23 Package Outline Dimensions



DIMENSIONS (mm are the original dimensions)

Symbol	A	B	b_p	C	D	E	H_E	A1	L_p
Min	0.95	1.78	0.35	0.08	2.70	1.20	2.20	0.013	0.20
Max	1.40	2.04	0.50	0.19	3.10	1.65	3.00	0.100	0.50

9.Ordering information



ww: Batch Code

Order Code	Package	Base QTY	Delivery Mode
UMW PESD5V0L2BT	SOT-23	3000	Tape and reel

10.Disclaimer

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