

1.Features

- 300Wattspeakpulsepower($t_p=8/20\mu s$)
- Unidirectionalconfigurations
- Solid-statesilicon-avalanchetechnology
- Low clampingvoltage
- Low leakagecurrent
- Low capacitance ($C_j=120\text{ pF typ.}$)
- Protectiontwo datalines
- IEC 61000-4-2 $\pm 30\text{ kV}$ contact $\pm 30\text{ kV}$ air
- IEC 61000-4-4(EFT)40A(5/50ns)
- IEC 61000-4-5(Lightning)17A(8/20 μs)

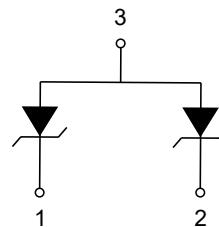
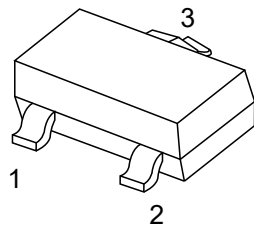
2.Applications

- 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 Compliant

4.Pinning information



SOT-23



5. Absolute Maximum Rating

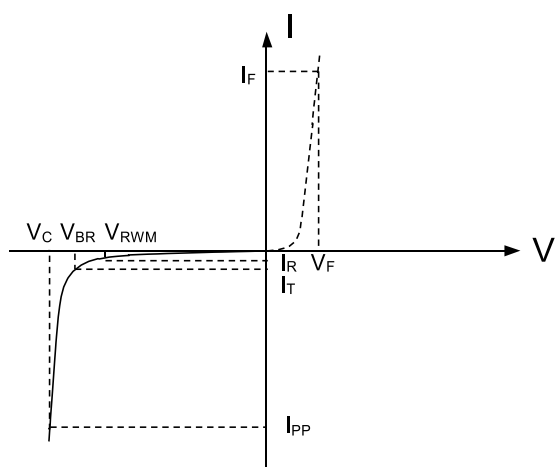
Parameter	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu s$)	P_{PP}	300	Watts
Peak Pulse Current ($t_p=8/20\mu s$)(note1)	I_{PP}	17	A
ESD per IEC 61000-4-2(Air)	V_{ESD}	30	kV
ESD per IEC 61000-4-2(Contact)		30	kV
Lead Soldering Temperature	T_L	260(10seconds)	°C
Junction Temperature	T_J	-55 to 125	°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	8.5	V
Reverse Leakage Current	I_R	$V_{RWM}=5V, T=25^{\circ}C$		0.5	1	μA
Peak Pulse Current	I_{PP}	$t_p=8/20\mu s$			17	A
Clamping Voltage	V_C	$I_{PP}=10A, t_p=8/20\mu s$			15	V
		$I_{PP}=17A, t_p=8/20\mu s$			16	V
Junction capacitance	C_J	$V_R=0V, f=1MHz, (Pin1\ Pin2\ to\ Pin3)$		150		pF

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

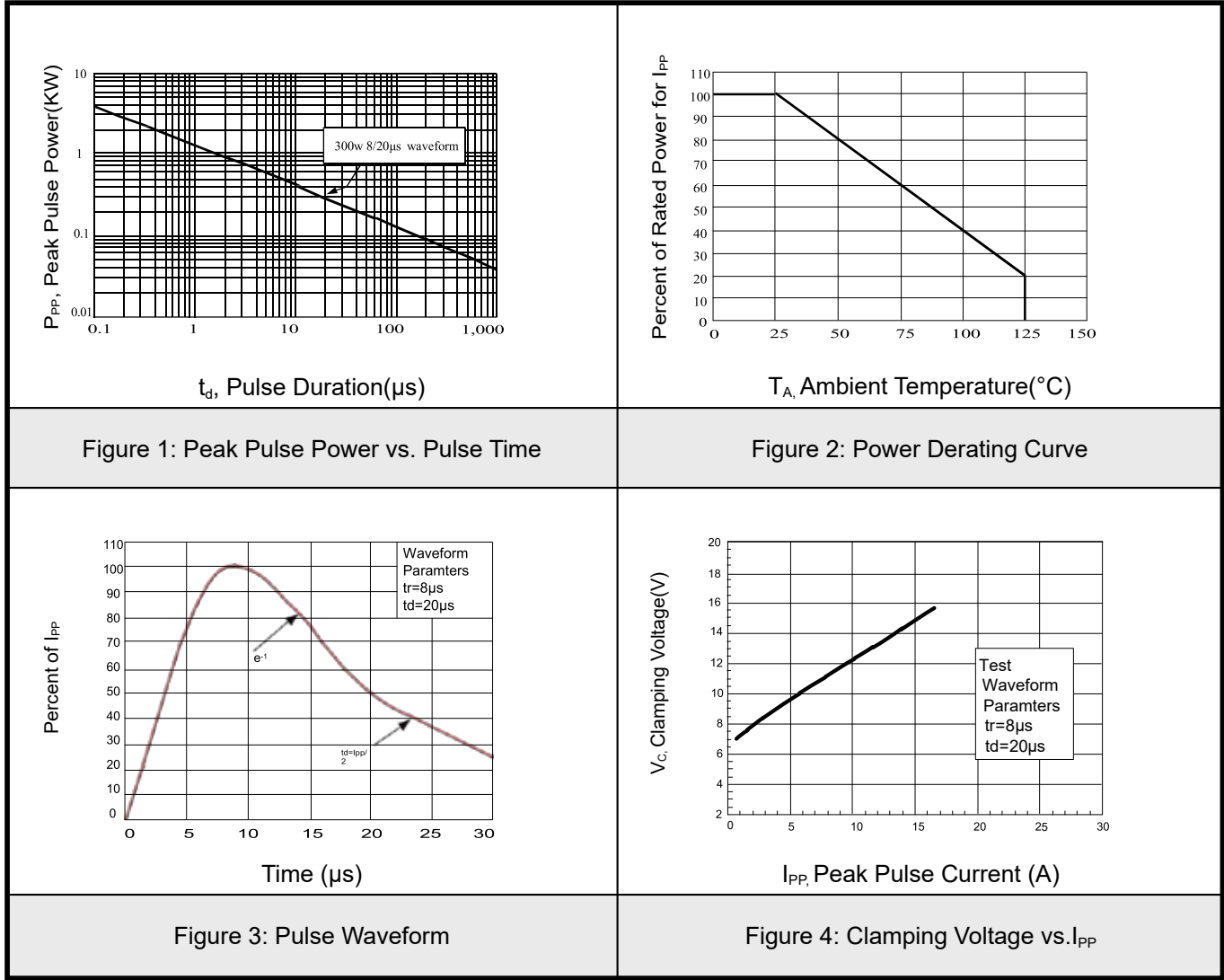


Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current

Notes: 8/20 μs pulse waveform.

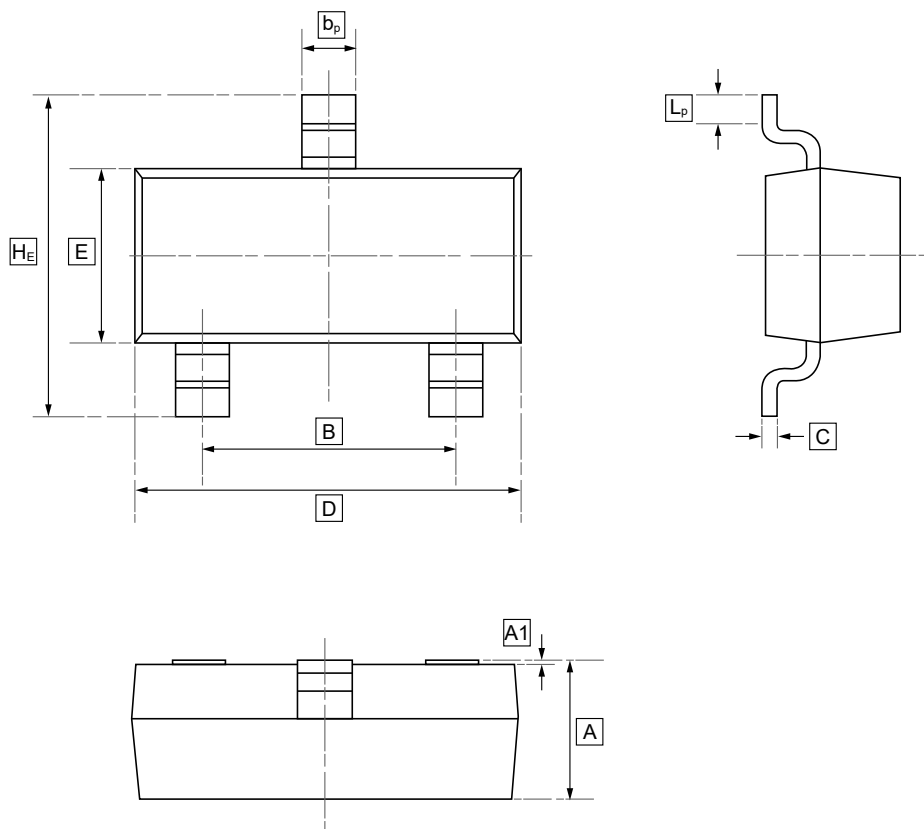


8. Typical characteristic





9.SOT-23 Package Outline Dimensions

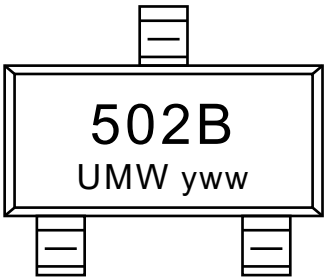


DIMENSIONS (mm are the original dimensions)

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



10.Ordering information



yww: Batch Code

Order Code	Package	Base QTY	Delivery Mode
UMW SP0502BAHTG	SOT-23	3000	Tape and reel



11.Disclaimer

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