

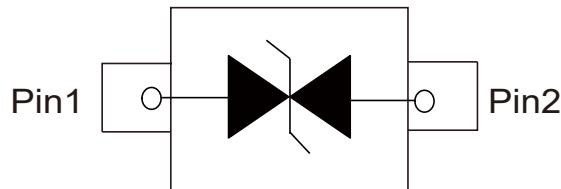
## 1. Features

- 90Watts peak pulse power ( $t_p=8/20\mu s$ )
- Bidirectional configurations
- Solid-state silicon-avalanchetechnology
- Low clamping voltage
- Low leakage current
- IEC 61000-4-2  $\pm 25kV$  contact  $\pm 25kV$ air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 8A (8/20 $\mu s$ )

## 2. Applications

- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Server
- Portable Instrumentation
- Pagers Peripherals

## 3. Pinning information



**SOD-523**



#### 4. Absolute Maximum Ratings

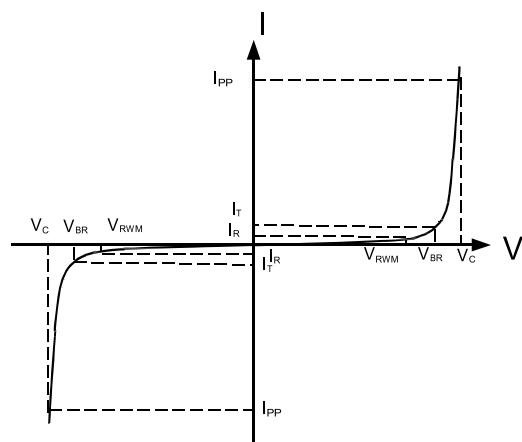
Parameter	Symbol	Value	Units
Peak Pulse Power ( $t_p=8/20\mu s$ )	$P_{PP}$	90	Watts
Peak Pulse Current ( $t_p=8/20\mu s$ )(note1)	$I_{PP}$	8	A
ESD per IEC 61000-4-2(Air)	$V_{ESD}$	25	kV
ESD per IEC 61000-4-2(Contact)		25	kV
Lead Soldering Temperature	$T_L$	260(10seconds)	°C
Junction Temperature	$T_J$	-55 to 150	°C
Storage Temperature	$T_{STG}$	-55 to 150	°C



## 5. Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Stand-Off Voltage	$V_{RWM}$				5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1\text{mA}$	6			V
Reverse Leakage Current	$I_R$	$V_{RWM}=5\text{V}, T=25^\circ\text{C}$			0.2	uA
Clamping Voltage	$V_C$	$I_{PP}=8\text{A}, t_p=8/20\mu\text{s}$		11	15	V
Junction capacitance	$C_J$	$V_R=0\text{V}, f=1\text{MHz}$		18	23	pF

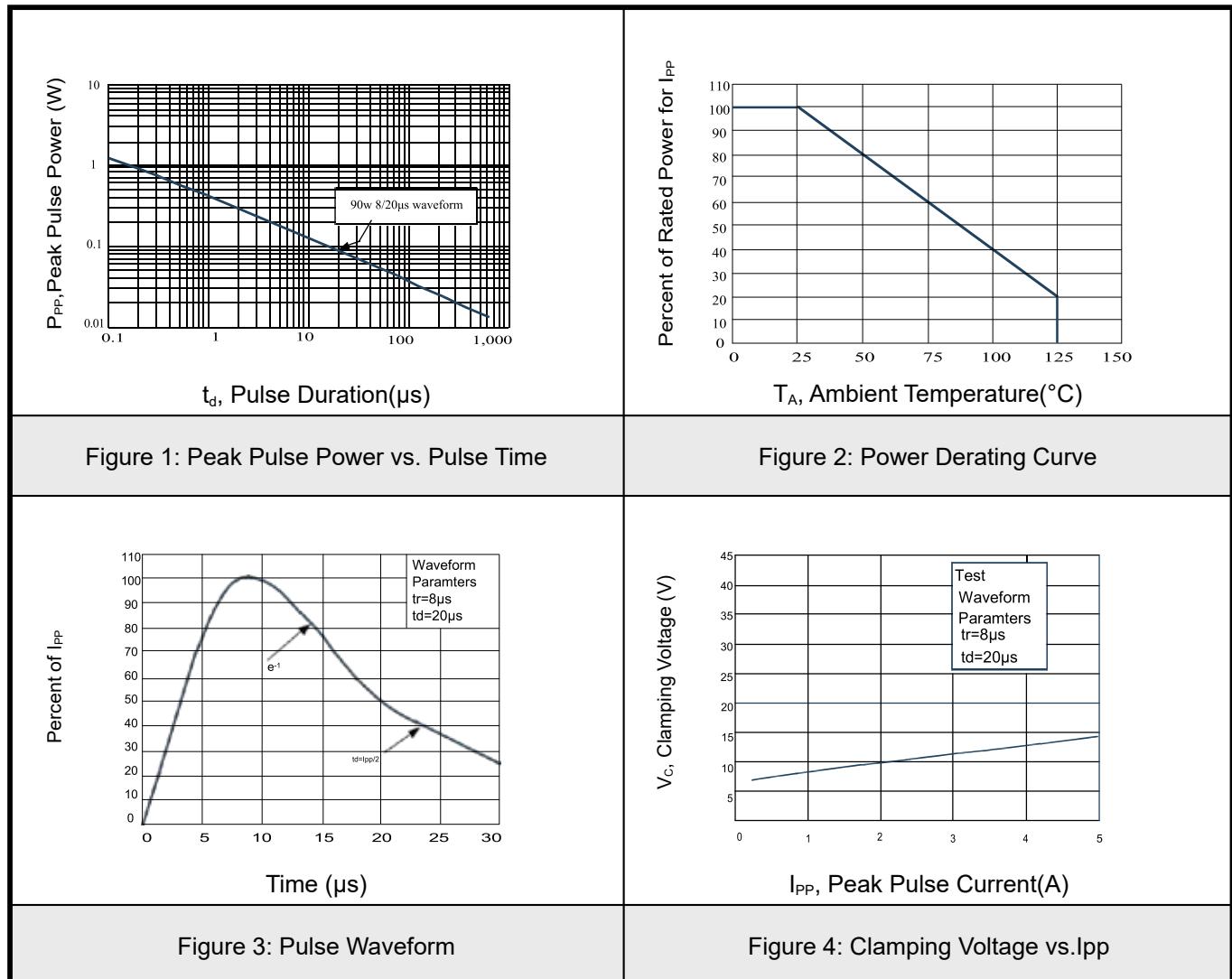
## 6. Electrical Parameters ( $T_A=25^\circ\text{C}$ unless otherwise noted )



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

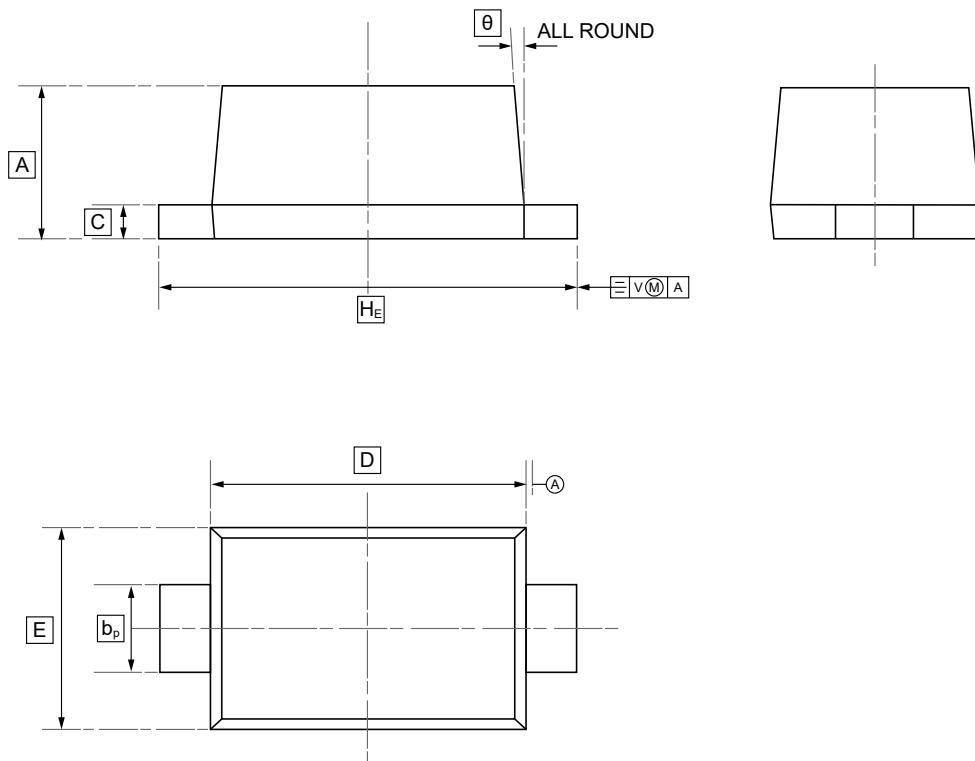


## 7.Typical characteristic





## 8.SOD-523 Package Outline Dimensions

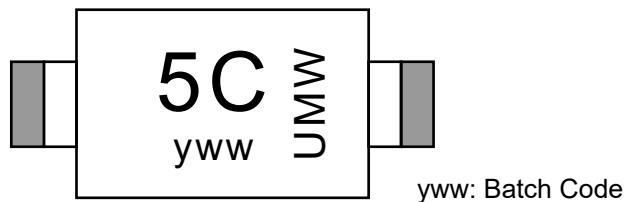


### DIMENSIONS (mm are the original dimensions)

Symbol	<b>A</b>	<b>b<sub>p</sub></b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>H<sub>E</sub></b>	<b>θ</b>
<b>Min</b>	0.58	0.3	0.100	1.15	0.75	1.5	5°
<b>Max</b>	0.68	0.4	0.135	1.25	0.85	1.7	



## 9.Ordering information



yww: Batch Code

Order Code	Package	Base QTY	Delivery Mode
UMW PRSB6.8SM	SOD-523	3000	Tape and reel



## 10. Disclaimer

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