

## 1.Description

The PESD2IVN24 is a Transient Voltage Suppressor Arrays that designed to protect components which are connected to data and transmission lines against electrostatic discharge (ESD), electrical fast Transients (EFT), and lightning. All pins are rated to withstand 30kV ESD pulses using the IEC61000-4-2 air discharge method.

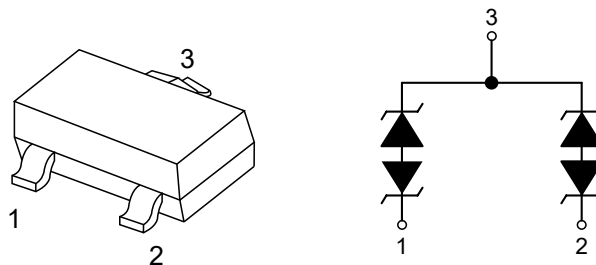
## 3.Applications

- Portable electronics
- Control & monitoring systems
- Servers, notebooks, and desktop PCs

## 2.Features

- IEC 61000-4-2 Level 4 ESD Protection
  - $\pm 30\text{kV}$  Contact Discharge
  - $\pm 30\text{kV}$  Air Discharge
- 450W Peak pulse Power (8/20us)
- Low clamping voltage
- Working voltage: 24V
- Low leakage current
- ESD Protection > 15kV

## 4.Pinning information



**SOT-23**



## 5. Absolute Maximum Ratings

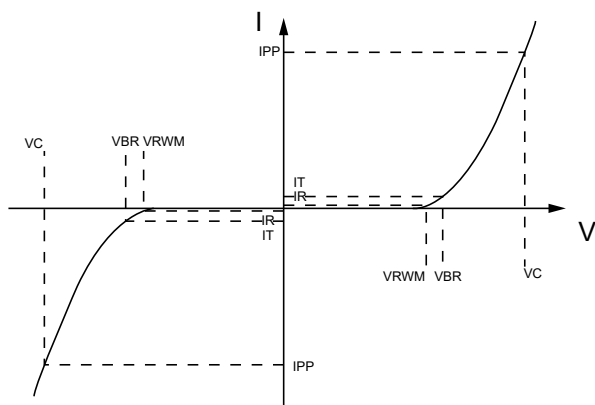
Parameter	Symbol	Min.	Max.	Units
Peak pulse power ( $t_p=8/20\mu s$ )@25°C	$P_{PK}$		450	W
Peak pulse current ( $t_p=8/20\mu s$ )@25°C	$I_{PP}$		8	A
ESD (IEC61000-4-2 air discharge) @25°C	$V_{ESD}$		±30	kV
ESD (IEC61000-4-2 contact discharge) @25°C	$V_{ESD}$		±30	kV
Junction temperature	$T_J$		150	°C
Operating temperature	$T_{OP}$	-40	125	°C
Storage temperature	$T_{STG}$	-55	150	°C
Lead temperature	$T_L$		260	°C



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

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Stand-Off Voltage	$V_{RWM}$			24		V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1\text{mA}$	26.5	28		V
Reverse Leakage Current	$I_R$	$V_{RWM}=24\text{V}$			1	$\mu\text{A}$
Clamping Voltage	$V_C$	$I_{PP}=1\text{A}$ , $t_p=8/20\mu\text{s}$		36		V
Clamping Voltage	$V_C$	$I_{PP}=8\text{A}$ , $t_p=8/20\mu\text{s}$		48		V
Junction capacitance	$C_J$	$V_R=0\text{V}$ , $f=1\text{MHz}$		30		pF

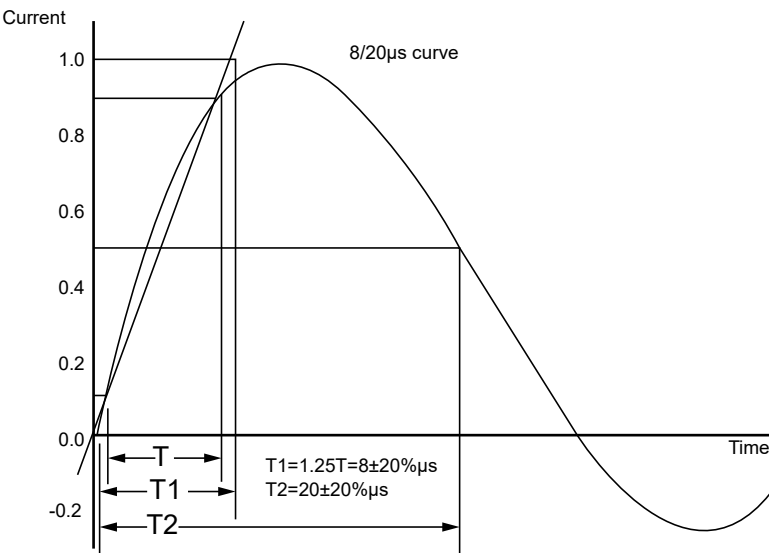
## 7. Electrical Parameters ( $T=25^\circ\text{C}$ )



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

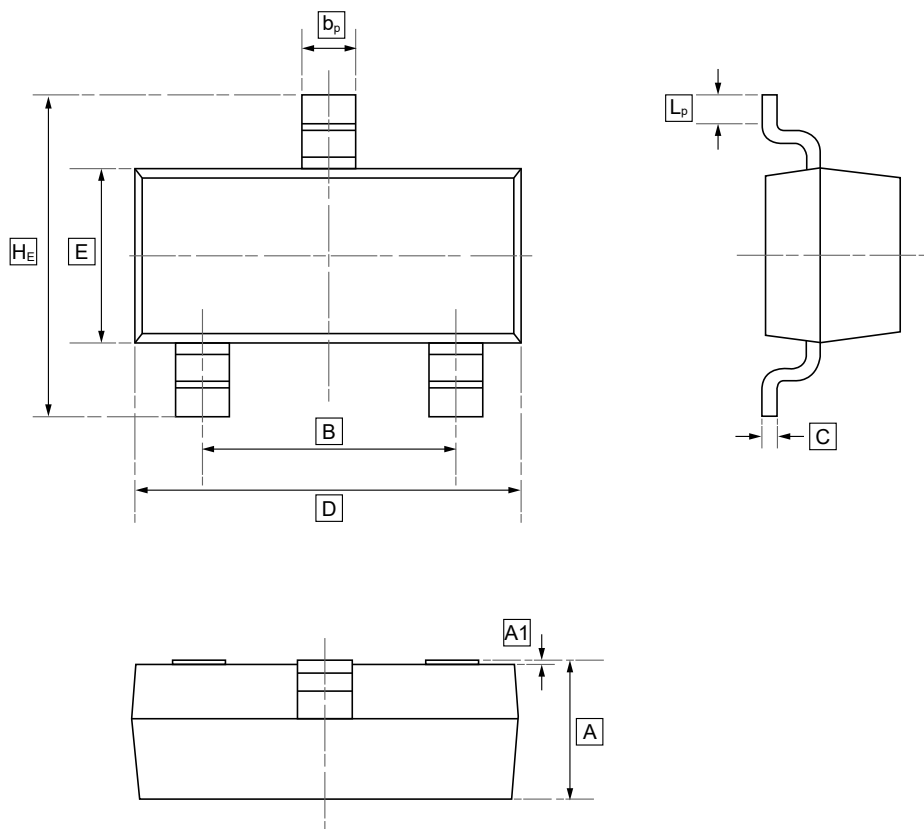


8. Typical Characteristic





## 9.SOT-23 Package Outline Dimensions

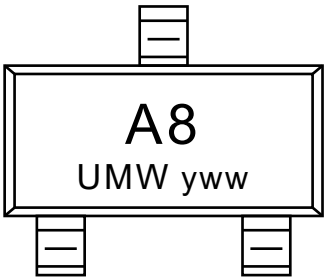


**DIMENSIONS (mm are the original dimensions)**

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



Order Code	Package	Base QTY	Delivery Mode
UMW PESD2IVN24	SOT-23	3000	Tape and reel



## **11.Disclaimer**

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