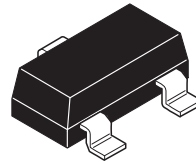
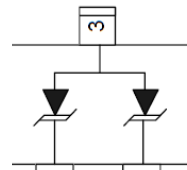


## Features

- 400 Watts peak pulse power ( $t_p = 8/20\mu s$ )
- SOT-323 package
- Protects two unidirectional lines
- Fast response time, typically  $< 1\text{ ns}$
- Excellent clamping voltage
- Low leakage current
- IEC 61000-4-2  $\pm 15\text{kV}$  (Air) ESD protection
- IEC 61000-4-2  $\pm 8\text{kV}$  (Contact) ESD protection
- IEC 61000-4-4 40A (5/50ns) EFT protection
- IEC 61000-4-5 7A (8/20us) Surge protection
- RoHS compliant



**Package: SOT-323**



**Schematic Diagram**

## Applications

- Cellular Handsets and Accessories
- Portable Electronics
- Control & Monitoring Systems
- Servers, Notebooks
- Set-Top Box
- Communication Systems

## Absolute Maximum Ratings

( $T_A=25^\circ\text{C}$  unless otherwise specified)

Rating	Symbols	Value	Units
Peak Pulse Power ( $t_p=8/20\mu s$ )	$P_{PP}$	400	W
Peak Pulse Current ( $t_p=8/20\mu s$ )	$I_{PP}$	7	A
Operating Temperature	$T_J$	-55 to +125	$^\circ\text{C}$
Storage temperature	$T_{STG}$	-55 to +150	$^\circ\text{C}$

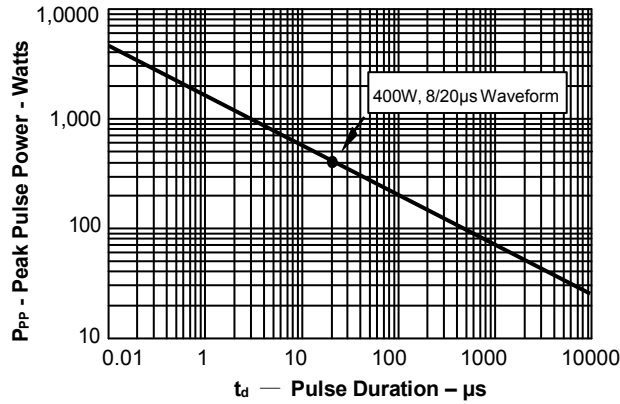
## Electrical Characteristics

( $T_A=25^\circ\text{C}$  unless otherwise specified)

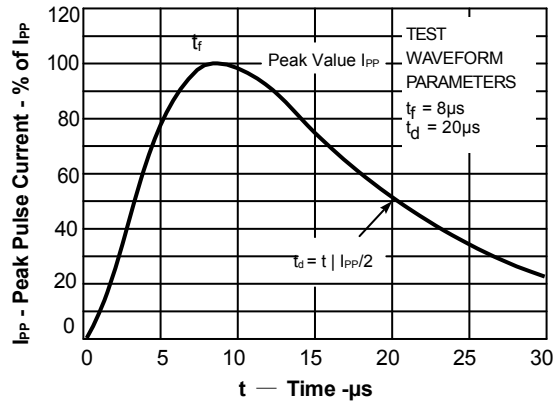
Parameter	Symbols	Conditions	Min	Typ	Max	Units
Reverse stand-off Voltage	$V_{RWM}$	-	-	-	24	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1\text{mA}$	26.7	-	-	V
Reverse Leakage Current	$I_R$	$V_R=24\text{V}$	-	-	1	$\mu\text{A}$
Clamping Voltage	$V_C$	$I_{PP}=7\text{A}, t_p=8/20\mu s$	-	-	60	V
Junction Capacitance	$C_J$	(pin1,2 to pin3) $V_R=0\text{V}, f=1\text{MHz}$	-	60	-	pF

**Typical Characteristic Curves**

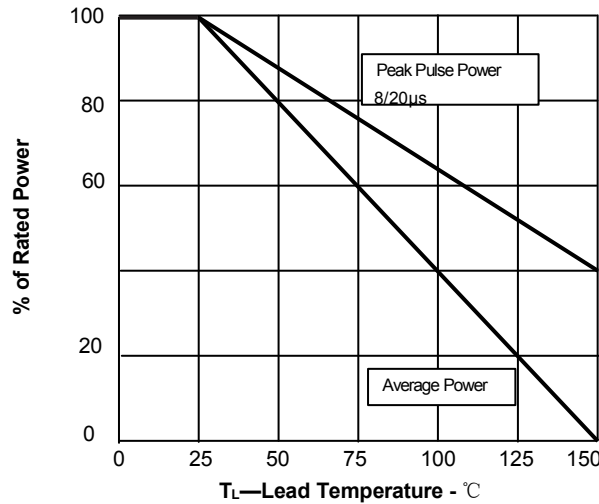
**Fig.1 Peak Pulse Power vs Pulse Time**



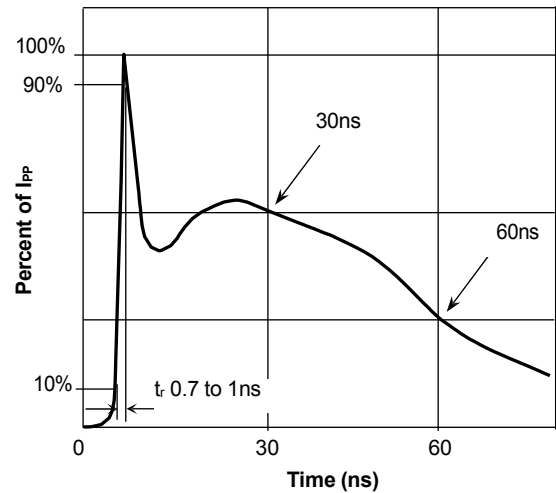
**Fig.2 Pulse Waveform-8/20μs**



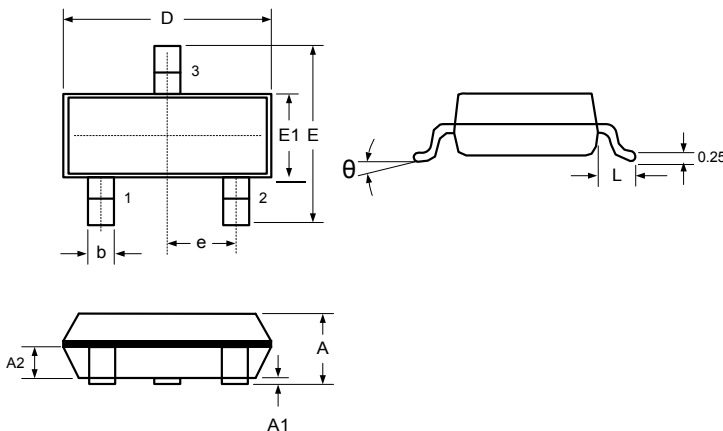
**Fig.3 Power Derating Curve**



**Fig.4 Pulse Waveform-ESD (IEC61000-4-2)**

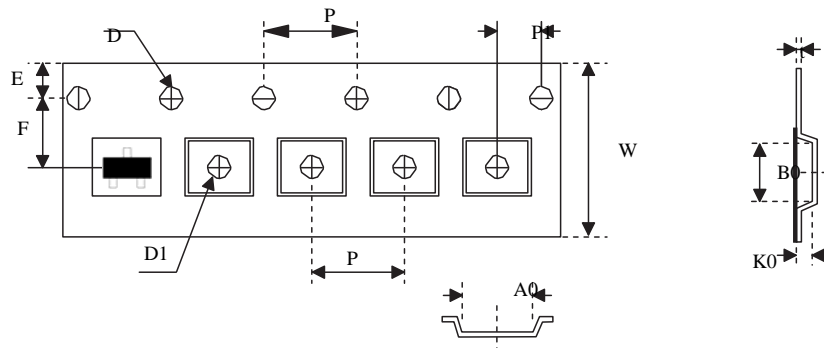


**Product Dimensions**



DIMENSIONS				
SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
D	2.000	2.200	0.079	0.087
b	0.200	0.400	0.008	0.016
E	2.150	2.450	0.085	0.096
E1	1.150	1.350	0.045	0.053
e	0.650TYP		0.026TYP	
L	0.525 REF		0.021 REF	
θ	0	8°	0	8°

### Package Information



Unit:mm

A0	B0	K0	D1	D	E	F	W	P	P1	t
3.15±0.10	2.77±0.10	1.22±0.10	0.95~1.10	1.50~1.60	1.75±0.10	3.50±0.05	7.90~8.3	4.00±0.10	2.00±0.05	0.22±0.40

### Order Information

Device	Package	Carrier	Quantity	HSF Status
SPES24VT323-3U	SOT-323	Tape & Reel	3000pcs	RoHS compliant