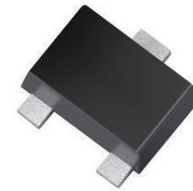
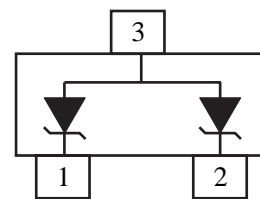


Features

- 125 Watts peak pulse power ($t_P = 8/20\mu s$)
- SOT-723 package
- Protects one bidirectional or two unidirectional lines
- Fast response time, typically $< 1\text{ ns}$
- Excellent clamping voltage
- Low leakage current
- Low capacitance
- IEC 61000-4-2 $\pm 15\text{kV}$ (Air) ESD protection
- IEC 61000-4-2 $\pm 8\text{kV}$ (Contact) ESD protection
- RoHS compliant



SOT-723



Schematic Diagram

Applications

- High-Definition Multimedia Interface(HDMI)
- Mobile Display Digital Interface(MDDI)
- RF/Antenna Circuits
- USB & Firewire Ports
- HBT Power Amp Protection
- Infiniband Transceiver Protection

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

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20\mu S$)	P_{PP}	125	W
Peak Pulse Current ($T_P = 8/20\mu S$)	I_{PP}	5	A
Junction 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}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	6		8	V
Reverse Leakage Current	I_R	$V_{RWM}=5\text{V}, T=25^\circ\text{C}$			1	μA
Clamping Voltage	V_C^1	$I_{PP}=5\text{A}, T_P=8/20\mu S$			22	V
Clamping Voltage	V_C^2	$I_{PP}=5\text{A}, T_P=8/20\mu S$			25	V
Junction Capacitance	C_J^1	$V_R=0\text{V}, f=1\text{MHz}$		3		pF
Junction Capacitance	C_J^2	$V_R=0\text{V}, f=1\text{MHz}$		1.5		pF

Note:

1. pin1 or pin2 to pin3
2. pin1 to pin2

Typical Characteristic Curves

Fig.1 Peak Pulse Power vs Pulse Time

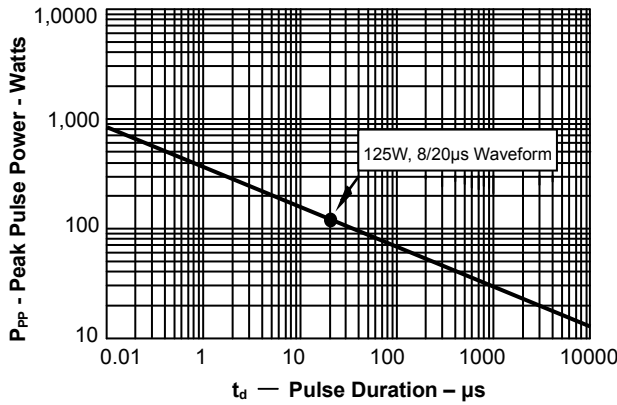


Fig.2 Pulse WaveForm-8/20μs

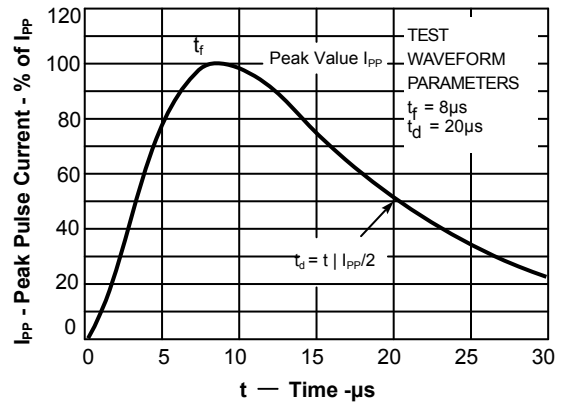


Fig.3 Power Derating Curve

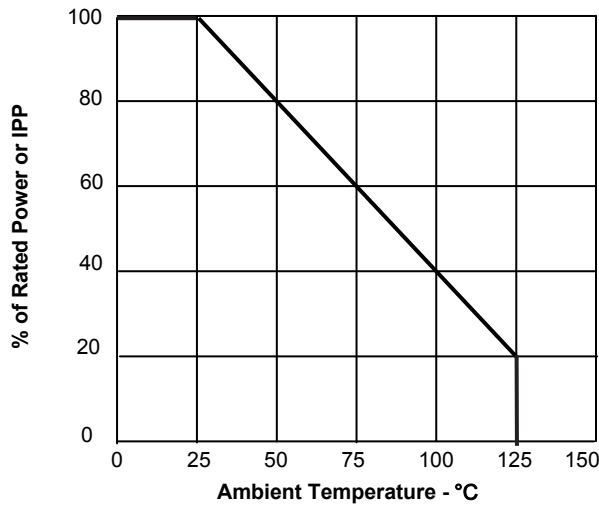
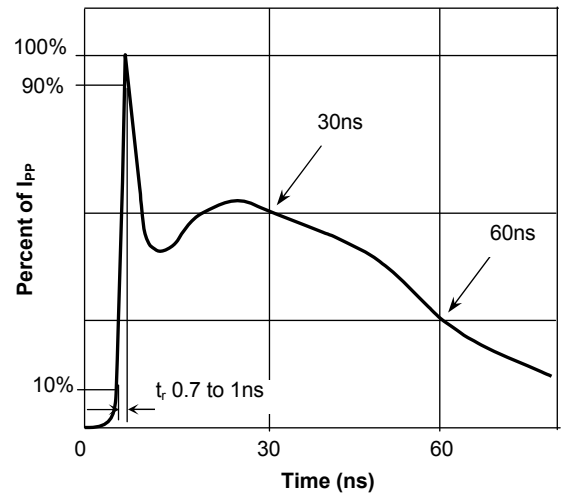
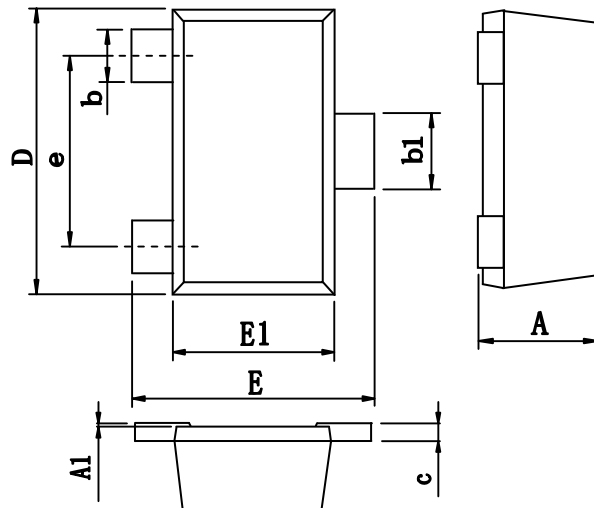


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)



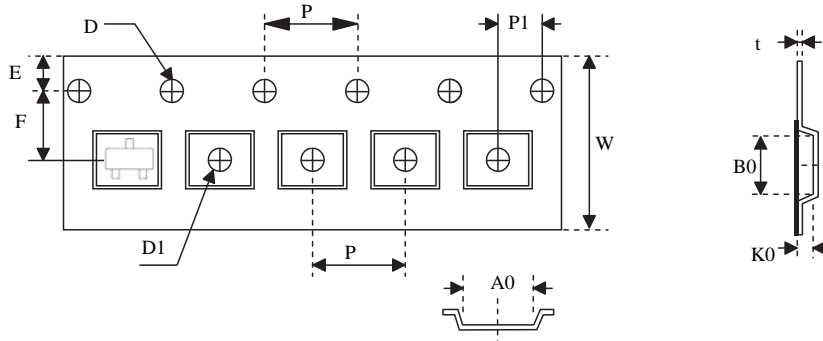
Product Dimensions



SOT-723

Dim	millimeters	
	min	max
A	0.45	0.55
A1	0.00	0.05
b	0.15	0.27
b1	0.25	0.37
c	0.07	0.17
D	1.15	1.25
E	1.15	1.25
E1	0.75	0.85
e	0.80TYP	

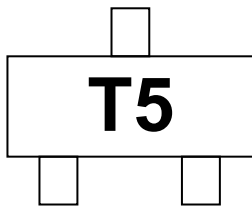
Package Information



Unit:mm

A0	B0	K0	D	E	F	W	P	P1	C	tmax
3.15±0.10	3.20± 0.10	1.40±0.10	1.50±0.10	1.75±0.10	3.50±0.50	4.00± 0.10	4.00± 0.10	2.00± 0.10	5.30±0.10	0.25

Marking



Order Information

Device	Package	Net Weight	Carrier	Quantity	HSF Status
SPESPLC5VT723-3U	SOT-723	0.0007g	Tape & Reel	3000pcs	RoHS compliant