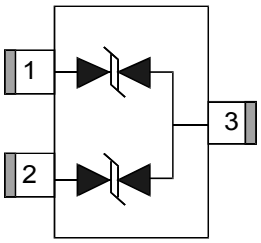
Features

- 400W peak pulse power (tp=8/20μs)
- Bidirectional and unidirectionalconfigurations
- Solid-state silicon-avalanche technology
- Low clampingvoltage
- Low leakage current
- Protection two datalines
- IEC 61000-4-2 ±30kV contact ±30kV air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 11A(8/20μs)



Applications

- Dataline
- Automatic Teller Machines
- Net works
- Power line

Mechanical Data

- SOT-23 package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power (t_p =8/20μs)	P_{PP}	400	W
Peak Pulse Current (t_p=8/20μs)(note1)	I_{pp}	11	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	30 30	kV
Lead Soldering Temperature	T_L	260/10S	℃
Junction Temperature	T_J	-55 to + 125	℃
Storage Temperature	T_{stg}	-55 to + 125	℃

Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				15	V
Reverse Breakdown Voltage	V_{BR}	I_T=1mA	16.7	18.5	20.0	V
Reverse Leakage Current	I_R	V_{RWM}=15V,T=25 ℃		0.1	0.5	μA
Peak Pulse Current	I_{PP}	tp=8 /20μs			11	A
Clamping Voltage	V_C	I_{PP}=11A,t_p=8/20μs		35	43	V
Junction Capacitance	C_j	V_R= 0V, f = 1MHz (Pin1 、Pin2 to Pin3)		20	25	pF

TypicalCharacteristics

Figure 1: Peak Pulse Power vs. Pulse Time

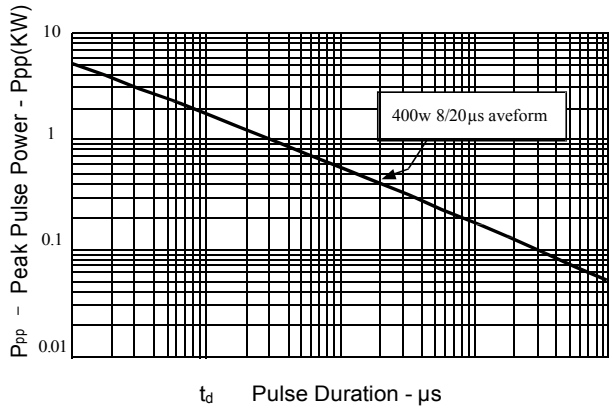


Figure 2: Power Derating Curve

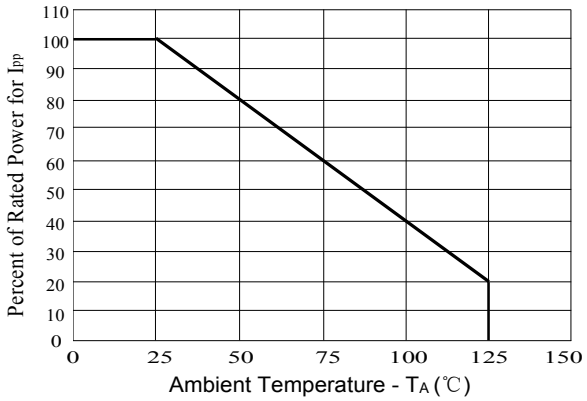


Figure3: Pulse Waveform

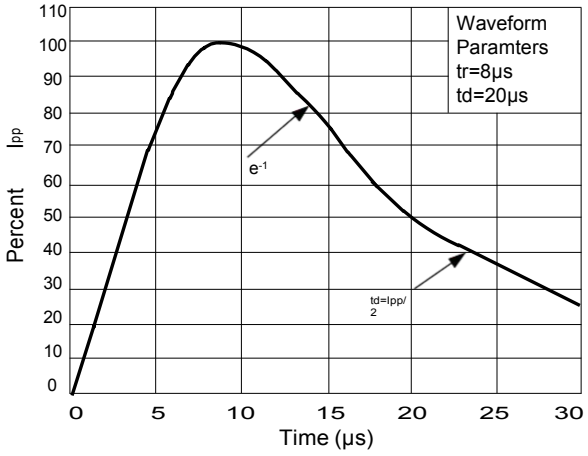
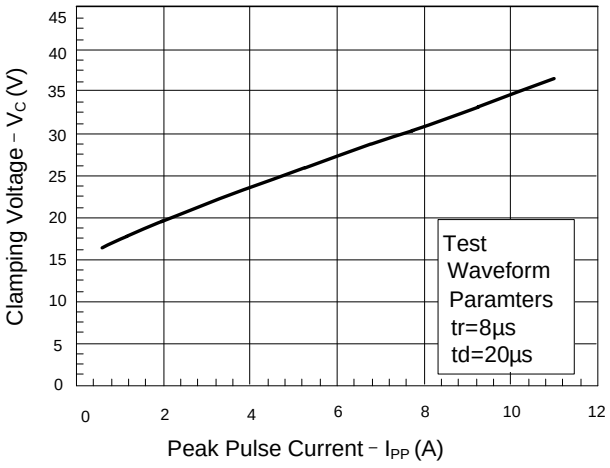
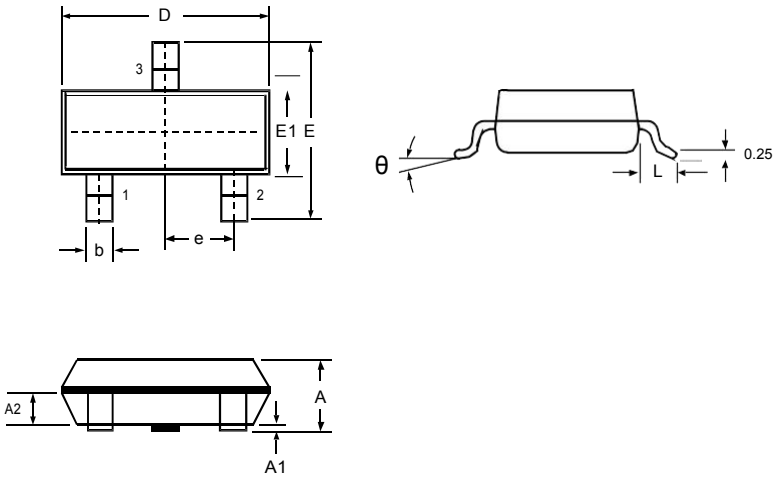


Figure 4: Clamping Voltage vs.Ipp

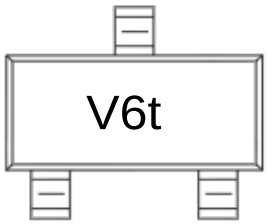


Outline Drawing – SOT-23



DIMENSIONS				
SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
D	2.800	3.000	0.110	0.118
b	0.300	0.500	0.012	0.020
E	2.250	2.550	0.089	0.100
E1	1.200	1.400	0.047	0.055
e	0.950 BSC		0.037 BSC	
L	0.300	0.500	0.012	0.020
θ	0	8°	0	8°

Marking



Ordering information

Order code	Package	Baseqty	Deliverymode
PESD15VL2BT	SOT-23	3000	Tape and reel