















**ESD** 

TVS

MOS

LDO

Diode

Sensor

DC-DC

# **Product Specification**

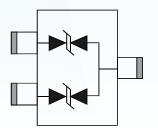
Domestic Part Number	PESD3V3L2BT
<ul><li>Overseas Part Number</li></ul>	PESD3V3L2BT
▶ Equivalent Part Number	PESD3V3L2BT





#### **Features**

- 400W peak pulse power (tp =8/20µs)
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- IEC 61000-4-2 ±30kV contact ±30kV air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 24A(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 <sub>p</sub> =8/20μs )	P <sub>PP</sub>	400	W
Peak Pulse Current ( t <sub>p</sub> =8/20µs ) (note1)	I <sub>pp</sub>	24	А
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V <sub>ESD</sub>	30 30	kV
Lead Soldering Temperature	TL	260/10S	℃ .
Junction Temperature	TJ	-55 to + 125	°C
Storage Temperature	T <sub>stg</sub>	-55 to + 125	°C



#### **Electrical Characteristics**

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V <sub>RWM</sub>				3.0	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>T</sub> =1mA	4.0	6.5	8.0	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> =3.0V,T=25 °C		0.1	0.5	μA
Peak Pulse Current	I <sub>PP</sub>	tp=8 /20µs			24	А
Clamping Voltage	Vc	I <sub>PP</sub> =24A,t <sub>p</sub> =8/20 µs			18.0	V
Junction Capacitance	Cj	V <sub>R</sub> = 0V, f= 1MHz (Pin1 \ Pin2 to Pin 3)		100	110	pF

## **TypicalCharacteristics**

Figure 1: Peak Pulse Power vs. Pulse Time

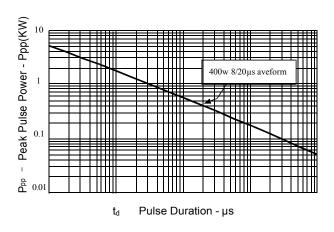


Figure 2: Power Derating Curve

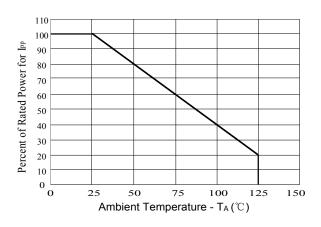


Figure3: Pulse Waveform

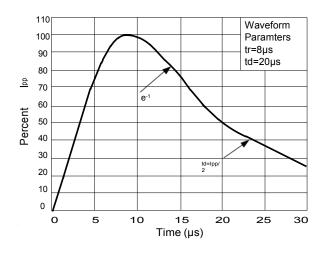
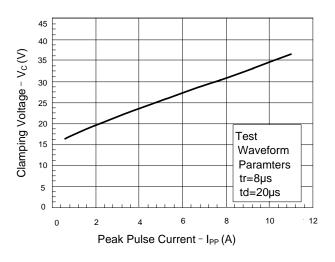
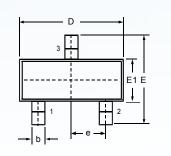


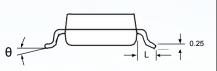
Figure 4: Clamping Voltage vs.lpp

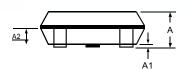




# **Outline Drawing - SOT-23**

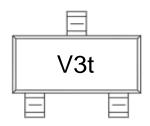






DIMENSIONS					
SYMBOL	MILLIMETER		INCHES		
	MIN	MAX	MIN	MAX	
Α	0.900	1.150	0.035	0.045	
A1	0.000	0.100	0.000	0.004	
A2	0.900	1.050	0.035	0.041	
D	2.800	3.000	0.110	0.118	
b	0.300	0.500	0.012	0.020	
E	2.250	2.550	0.089	0.100	
E1	1.200	1.400	0.047	0.055	
е	0.950 BSC		0.037 BSC		
L	0.300	0.500	0.012	0.020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

# Marking



# **Ordering information**

Order code	Package	Baseqty	Deliverymode
PESD3V3L2BT	SOT-23	3000	Tape and reel



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