GOODWORK

PESD15VL2BT

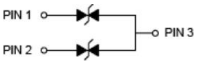
Applications

◇ DeviceNet
◇ Low and High Speed CAN
◇ Smart Distribution Systems (SDS)
◇ Controlled Area Network − CAN 2.1 / CAN FD

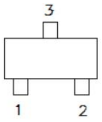
Features

◇ 240W (8/20 μs) Peak Pulse Power
◇ High ESD Protection Level
◇ SOT23 Thin SMD Package
◇ RoHS compliant
◇ Matte Tin Lead finish (Pb-Free)
◇ Protect Two CAN Bus Lines

Circuit Diagram

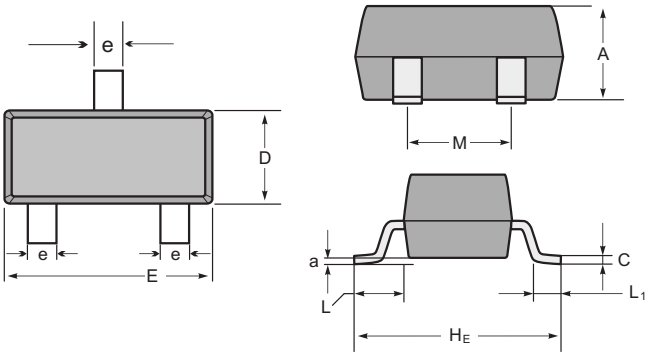


PIN Diagram



Ordering information

Device	Package	Making
PESD15VL2BT	SOT−23	V6W



SOT-23 mechanical data

UNIT		A	C	D	E	HE	e	M	L	L1	a
mm	max	1.1	0.15	1.4	3.0	2.6	0.5	1.95	0.55 (ref)	0.36 (ref)	0.0
	min	0.9	0.08	1.2	2.8	2.2	0.3	1.7			0.15
mil	max	43	6	55	118	102	20	77	22 (ref)	14 (ref)	0.0
	min	35	3	47	110	87	12	67			6

Absolute Maximum Ratings (T_A=25℃ unless otherwise specified)

Symbol	Parameter	Value	Unit
P_{PK}	Peak Pulse Power	240	W
I_{PP}	Peak Pulse Current	6	A
V_{ESD} (Contact)	Contact ESD Voltage per IEC61000-4-2	15	kV
V_{ESD}(Air)	Air ESD Voltage per IEC61000-4-2	15	kV
TJ	Junction Temperature	-65 to +150	℃
TSTG	Storage Temperature	-65 to +150	℃

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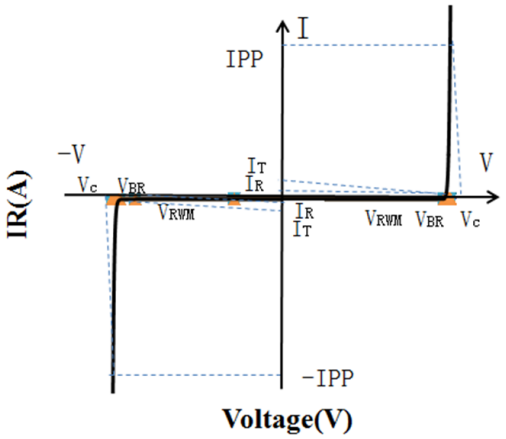
Portion Electronics Parameter

Symbol	Parameter
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
Vc	Clamping Voltage @Ic

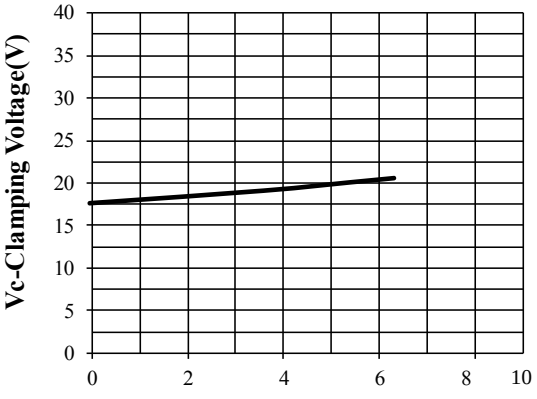


Electrical Characteristics (T_A=25°C unless otherwise specified)

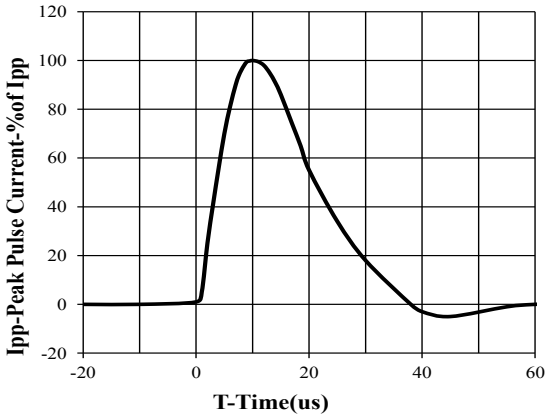
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V_{RWM}				15	V
Breakdown Voltage	V_{BR}	I_T = 1mA	16.5	18	20	V
Reverse Leakage Current	I_R	V_{RWM} = 15V			1	μA
Clamping Voltage	V_C	I_{PP} =6A (8 x 20μs pulse)		27	40	V
Junction Capacitance	C_J	VR = 0V, f = 1MHz		18	30	pF

RATING AND CHARACTERISTIC CURVES (PESD15VL2BT)

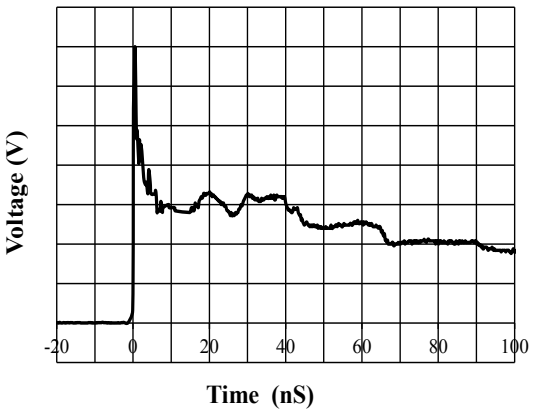
Junction Capacitance vs. Reverse Voltage



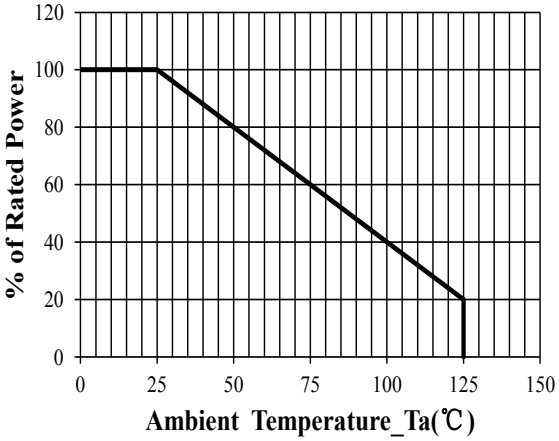
Clamping Voltage vs. Peak Pulse Current



8 X 20us Pulse Waveform



IEC61000−4−2 Pulse Waveform



Power Derating Curve