

Applications

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

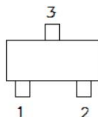
Features

- ◇ 240W (8/20 μ s) 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

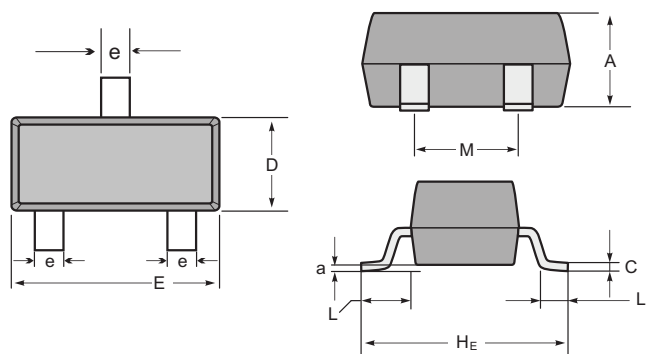


PIN Diagram



Ordering information

Device	Package	Marking
PESD15VL2BT	SOT-23	V6W



SOT-23 mechanical data

UNIT		A	C	D	E	H _E	e	M	L	L ₁	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

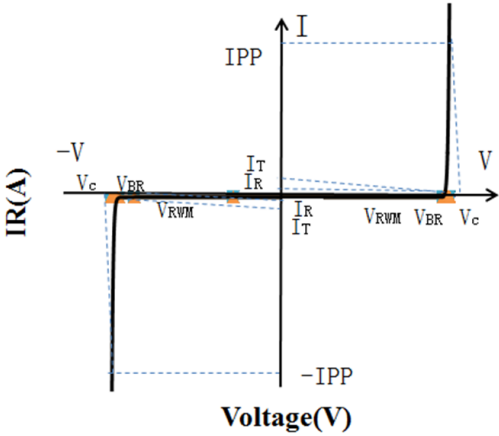
Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Symbol	Parameter	Value	Unit
PPK	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
T _J	Junction Temperature	-65 to +150	°C
T _{STG}	Storage Temperature	-65 to +150	°C

PESD15VL2BT

Portion Electronics Parameter

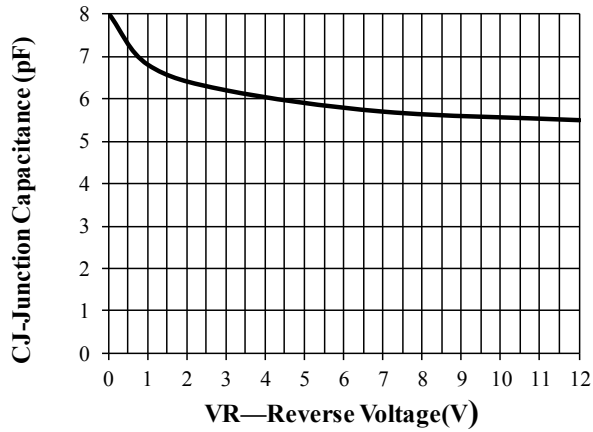
Symbol	Parameter
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_c	Clamping Voltage @ I_c



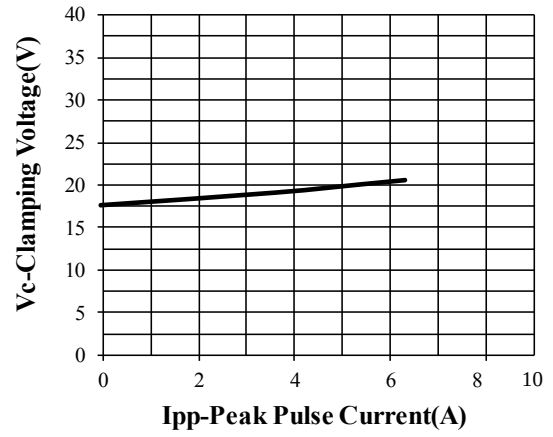
Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

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

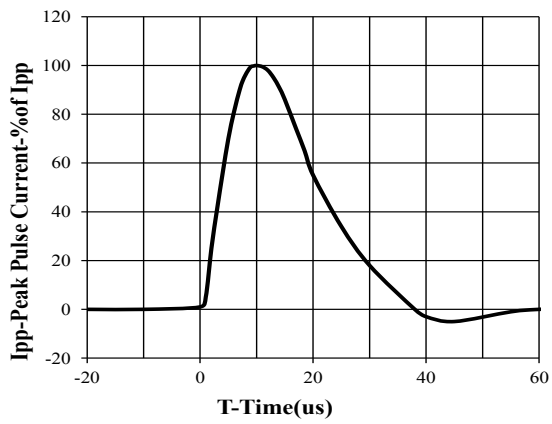
RATING AND CHARACTERISTIC CURVES (PESD15VL2BT)



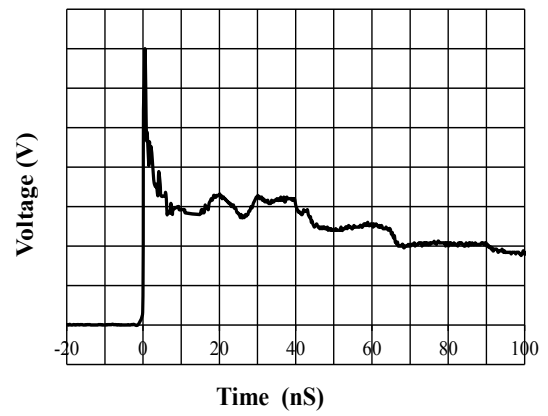
Junction Capacitance vs. Reverse Voltage



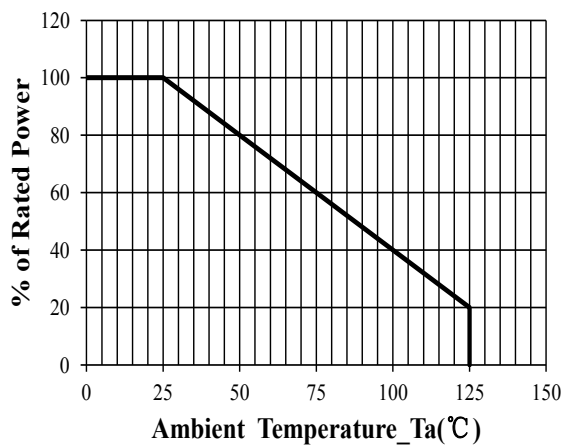
Clamping Voltage vs. Peak Pulse Current



8 X 20us Pulse Waveform



IEC61000-4-2 Pulse Waveform



Power Derating Curve