

DESCRIPTION

The PESD1CAN has been designed to protect the CAN transceiver in high-speed and fault tolerant networks from ESD and other harmful transient voltage events. This device provides bidirectional protection for each data line with a single compact SOT-23 package, giving the system designer a low cost option for improving system reliability and meeting stringent EMI requirements.

FEATURES

- ◇ IEC61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
- ◇ IEC61000-4-4 (EFT) 40A (5/50ns)
- ◇ IEC61000-4-5 (Lighting) 3A (8/20 μs)
- ◇ 200 Watts Peak Pulse Power per (tp=8/20 μs)
- ◇ Working voltages : 24V
- ◇ Low clamping voltage
- ◇ Low leakage current

MACHANICAL DATA

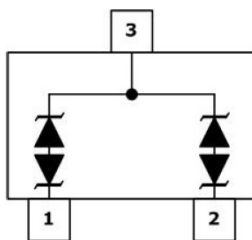
- ◇ SOT-23 package
- ◇ Flammability Rating: UL 94V-0
- ◇ Packaging: Tape and Reel
- ◇ High temperature soldering guaranteed: 260°C/10s
- ◇ Reel size: 7 inch

ORDERING INFORMATION

- ◇ Package: SOT-23
- ◇ Marking: C24
- ◇ Material: Halogen free
- ◇ Packing: Tape & Reel
- ◇ Quantity per reel: 3,000pcs

APPLICATIONS

- ◇ Industrial Control Networks
- ◇ Smart Distribution Systems
- ◇ Automotive Networks
- ◇ Low and High-Speed CAN
- ◇ Fault Tolerant CAN

PIN CONFIGURATION**PACKAGE OUTLINE**

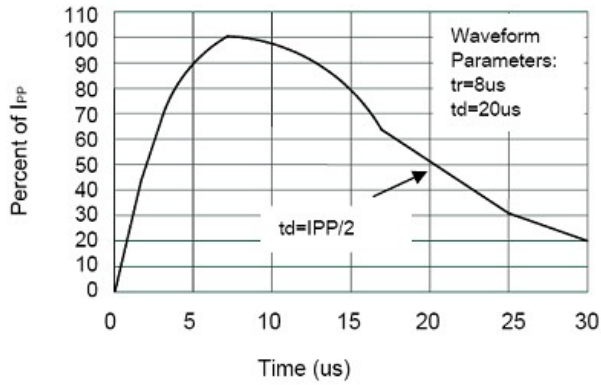
ABSOLUTE MAXIMUM RATING

Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	± 30 ± 20	kV
P_{PP}	Peak Pulse Power (8/20 μ s)	200	W
T_{OPT}	Operating Temperature	-55/+150	$^{\circ}$ C
T_{STG}	Storage Temperature	-55/+150	$^{\circ}$ C
T_L	Lead Soldering Temperature	260 (10 sec.)	$^{\circ}$ C

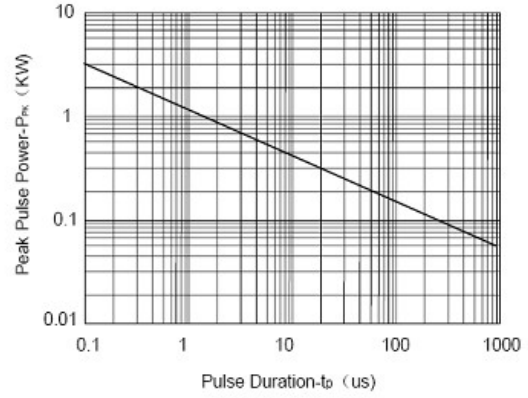
ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}$ C)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage	Pin 1,2 to Pin3			24	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1mA$ Pin 1,2 to Pin3	26		32	V
I_R	Reverse Leakage Current	$V_{RWM} = 24V$ Pin 1,2 to Pin3			1	μA
V_{C1}	Clamping Voltage 1	$I_{PP} = 1A, t_p = 8/20\mu s$ Pin 1,2 to Pin3			36	V
V_{C2}	Clamping Voltage 2	$I_{PP} = 3A, t_p = 8/20\mu s$ Pin 1,2 to Pin3			50	V
C_J	Junction Capacitance	$V_R = 0V, f = 1MHz$ Pin 1,2 to Pin3		13	17	pF

ELECTRICAL CHARACTERISTICS CURVE

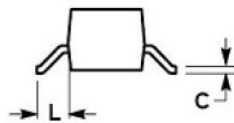
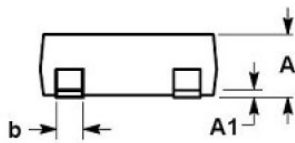
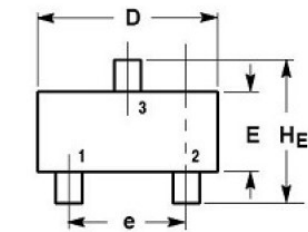


Pulse Waveform



Non-Repetitive Peak Pulse Power vs. Pulse Time

SOT-23 PACKAGE OUTLINE DIMENSIONS



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.89	1.00	1.11	0.035	0.040	0.044
A1	0.01	0.06	0.10	0.001	0.002	0.004
b	0.37	0.44	0.50	0.015	0.018	0.020
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.90	3.04	0.110	0.114	0.120
E	1.20	1.30	1.40	0.047	0.051	0.055
e	1.78	1.90	2.04	0.070	0.075	0.081
L	0.35	0.54	0.69	0.014	0.021	0.029
HE	2.10	2.40	2.64	0.083	0.094	0.104

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [ESD Suppressors / TVS Diodes](#) category:

Click to view products by [Yongyutai Electronics](#) manufacturer:

Other Similar products are found below :

[60KS200C](#) [D18V0L1B2LP-7B](#) [D5V0F4U5P5-7](#) [NTE4902](#) [P4KE27CA](#) [P6KE11CA](#) [P6KE39CA-TP](#) [P6KE8.2A](#) [JANTX1N6053A](#)
[SA110CA](#) [SA60CA](#) [SA64CA](#) [SMBJ12CATR](#) [SMBJ33CATR](#) [SMBJ8.0A](#) [ESD101-B1-02ELS E6327](#) [ESD105-B1-02EL E6327](#) [ESD112-B1-02EL E6327](#) [ESD119B1W01005E6327XTSA1](#) [ESD5V0L1B02VH6327XTSA1](#) [ESD7451N2T5G](#) [19180-510](#) [CPDT-5V0USP-HF](#)
[3.0SMCJ33CA-F](#) [3.0SMCJ36A-F](#) [HSPC16701B02TP](#) [JANTX1N6126A](#) [JANTX1N6462](#) [JANTX1N6465](#) [USB50805e3/TR7](#)
[D3V3Q1B2DLP3-7](#) [D55V0M1B2WS-7](#) [DRTR5V0U4SL-7](#) [SCM1293A-04SO](#) [ESD200-B1-CSP0201 E6327](#) [SM12-7](#) [SM1605E3/TR13](#)
[SMLJ45CA-TP](#) [CEN955 W/DATA](#) [82350120560](#) [VESD12A1A-HD1-GS08](#) [CPDUR5V0R-HF](#) [CPDQC5V0U-HF](#) [CPDQC5V0USP-HF](#)
[CPDQC5V0-HF](#) [D1213A-01LP4-7B](#) [ESD101-B1-02EL E6327](#) [824500181](#) [MMAD1108/TR13](#) [5KP100A](#)