

Low Capacitance Single-Line Bi-Directional ESD protection Diode

DEDESCRIPTION

The EBXXVN5 Series is designed to protect voltage sensitive components that require low capacitance from ESD and transient voltage events. The EBXXVN5 are low capacitance Transient Voltage (TVS) Design Bidirectional device that is to protect sensitive electronics from damage or latch-up due to ESD. They are designed for use in applications where board space is at a premium.

EBXXVN5 may be used to meet the immunity requirements of IEC 61000-4-2, level 4. The small SOD-523, package makes them ideal for use in portable electronics such as cell phone, PDA's, notebook computers, DSC, MP3, USB ports and ADSL.

EB0XXVN5-TRG ROHS Compliant This is Halogen Free

IEC COMPATIBILITY

Transient protection for high-speed data lines to

- IEC 61000-4-2 (ESD) ±15KV (Air)**
- ±8KV (contact)**
- IEC 61000-4-4 (EFT) 40A (5/50ns)**

FEATURE

- ◆ 100Watts Peak Pulse Power per line(tp=8/20µs)
- ◆ Protects One Birectional I/O Line
- ◆ Low clamping voltage
- ◆ Working Voltage : 3.3V, 5V, 8V, 12V
- ◆ Low leakage current
- ◆ Ultra-small package
- ◆ Qualified max reflow temperature 260°C

APPLICATIONS

- ◆ Cell phone Handsets & Accessories
- ◆ PDAs
- ◆ Digital Cameras
- ◆ Display Port
- ◆ Notebooks and Handhelds
- ◆ HDMI Ports
- ◆ USB Ports
- ◆ PCI Express
- ◆ Portable Instrumentation
- ◆ Microprocessor based equipment

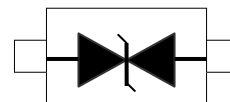


Low Capacitance Single-Line Bi-Directional ESD

PIN CONFIGURATION



SOD-523
Top View



PART NUMBER INFORMATION

E B XXV N5 - TR G a b c d e f	<p>a : Product Type. b : Bi-Directional c : Voltage. 33V=3.3V, 05V=5.0V... d : Package Code e : Handling Code</p> <p>g : Lead Plating Code G : Lead-free product.</p> <p><i>This product is Halogen Free</i></p>
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ORDERING INFORMATION

Part Number	Package Code	Handling Code	Shipping
EB33VN5-TRG	N5 : SOD-523	TR : Tape&Reel	3K/Reel
EB05VN5-TRG			
EB08VN5-TRG			
EB12VN5-TRG			

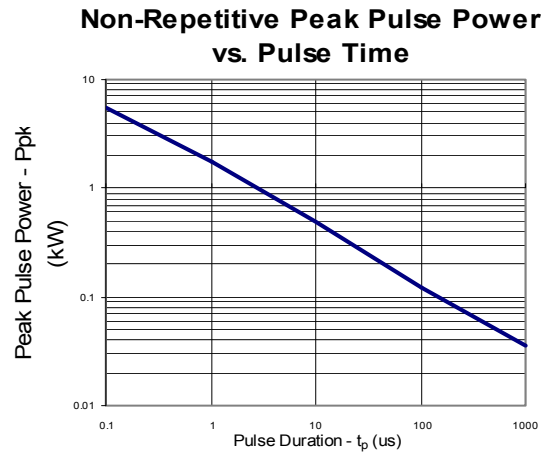
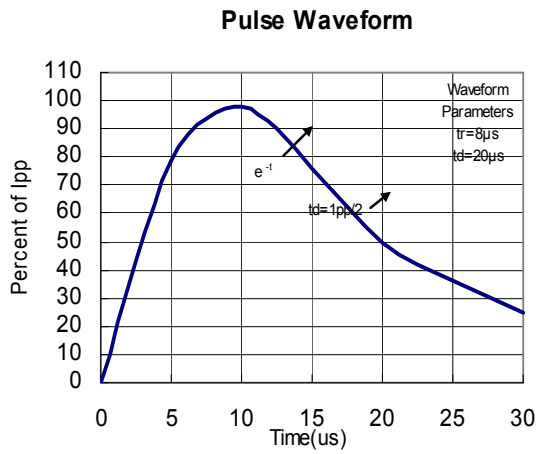
ABSOLUTE MAXIMUM RATINGS (@ 25°C Unless otherwise specified)

Symbol	Parameter	Typical	Unit
PPP	Peak Pulse Power (tp=8/20µs waveform)	100	W
T _L	Lead Soldering Temperature	260(10 sec.)	°C
T _J	Operation Temperature Range	-55 to150	°C
T _{STG}	Storage Temperature Range	-55 to150	°C

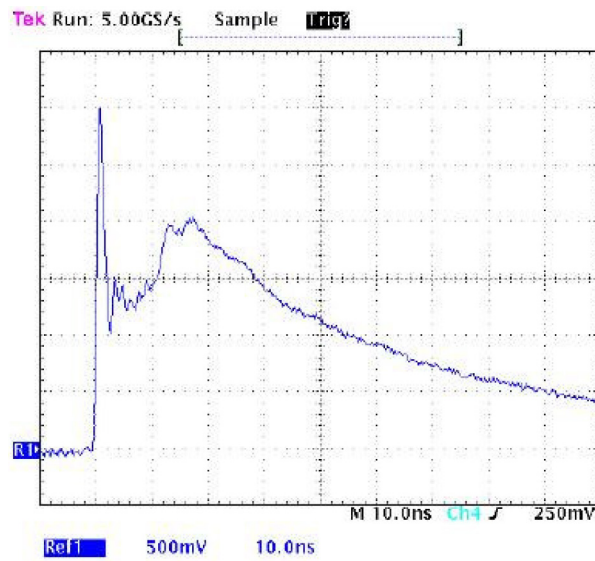
ELECTRICAL CHARACTERISTICS(@ 25°C Unless otherwise specified)

Parts	V _{RWM} (V) (Max)	V _B (V) (Min)	I _T (mA)	V _c @1A (Max)	V _c		I _R (µA) (Max)	C _T (pF) (Max)
					(Max)	(@A)		
EB33V	3.3	4.5	1	7	18	5.5	5	13
EB05V	5	6	1	9.8	20	5	1	10
EB08V	8	8.5	1	13.4	25	4	1	8
EB12V	12	13.3	1	19	30	3.5	1	5

TYPICAL CHARACTERISTICS



**ESD Pulse Waveform
 (8KV Contant per IEC 61000-4-2)**



SOD-523 PACKAGE DIMENSIONS

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.100	1.300	0.043	0.051
B	0.700	0.900	0.028	0.035
C	0.500	0.700	0.020	0.028
D	0.250	0.350	0.010	0.014
J	0.070	0.200	0.0028	0.0079
K	0.150	0.250	0.006	0.010
S	1.500	1.700	0.059	0.067

