



BiAs Single-Line ESD Protection Diode With Reverse Breakdown Voltage Above 15.5 V



KEY BENEFITS

- Ultra compact LLP1006-2L package
 - 1.0 mm by 0.6 mm footprint
 - Extremely low profile of < 0.4 mm
- Minimum 15.5 V reverse breakdown voltage
- Low leakage current of < 0.1 μ A
- Low load capacitance of 45 pF
- RoHS-compliant and halogen-free

APPLICATIONS

- ESD protection in portable electronics, including gaming systems, smartphones, and tablets

RESOURCES

- Datasheet: VESD15A1-HD1 - www.vishay.com/ppg?82724
- For technical questions contact ESDProtection@vishay.com
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



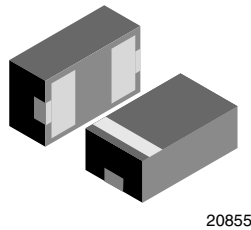
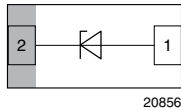
RoHS
COMPLIANT

HALOGEN
FREE

GREEN
(5-2008)

A WORLD OF
SOLUTIONS™

BiAs Single-Line ESD Protection Diode With Reverse Breakdown Voltage Above 15.5 V


MARKING (example only)


Bar = cathode marking

X = date code

Y = type code (see table below)

DESIGN SUPPORT TOOLS click logo to get started

FEATURES

- Ultra compact LLP1006-2L package
- Low package height < 0.4 mm
- 1-line ESD protection
- Low leakage current < 0.01 μ A
- Low load capacitance $C_D = 45$ pF ($V_R = 0$ V; $f = 1$ MHz)
- ESD immunity acc. IEC 61000-4-2 ± 30 kV contact discharge
 ± 30 kV air discharge
- High surge current acc. IEC 61000-4-5 $I_{PP} > 6$ A
- Soldering can be checked by standard vision inspection. No X-ray necessary
- Pin plating NiPdAu (e4) no whisker growth
- e4 - precious metal (e.g. Ag, Au, NiPd, NiPdAu) (no Sn)
- PATENT(S): www.vishay.com/patents
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



ORDERING INFORMATION			
DEVICE NAME	ORDERING CODE	TAPED UNITS PER REEL (8 mm TAPE on 7" REEL)	MINIMUM ORDER QUANTITY
VESD15A1-HD1	VESD15A1-HD1-G4-08	8000	8000

PACKAGE DATA						
DEVICE NAME	PACKAGE NAME	TYPE CODE	WEIGHT	MOLDING COMPOUND FLAMMABILITY RATING	MOISTURE SENSITIVITY LEVEL	SOLDERING CONDITIONS
VESD15A1-HD1	LLP1006-2L	W	0.72 mg	UL 94 V-0	MSL level 1 (according J-STD-020)	Peak temperature max. 260 °C

ABSOLUTE MAXIMUM RATINGS RATINGS VESD15A1-HD1				
PARAMETER	TEST CONDITIONS	SYMBOL	VALUE	UNIT
Peak pulse current	Acc. IEC 61000-4-5; $t_p = 8/20$ μ s; single shot	I_{PPM}	6	A
Peak pulse power	Acc. IEC 61000-4-5; $t_p = 8/20$ μ s; single shot	P_{PP}	150	W
ESD immunity	Contact discharge acc. IEC 61000-4-2; 10 pulses	V_{ESD}	± 30	kV
	Air discharge acc. IEC 61000-4-2; 10 pulses		± 30	kV
Operating temperature	Junction temperature	T_J	-40 to +125	°C
Storage temperature		T_{stg}	-55 to +150	°C

PATENT(S): www.vishay.com/patents

This Vishay product is protected by one or more United States and international patents.

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 [Vishay](#) manufacturer:

Other Similar products are found below :

[60KS200C](#) [D12V0H1U2WS-7](#) [D18V0L1B2LP-7B](#) [82356050220](#) [D5V0M5U6V-7](#) [NTE4902](#) [P4KE27CA](#) [P6KE11CA](#) [P6KE39CA-TP](#)
[P6KE8.2A](#) [SA110CA](#) [SA60CA](#) [SA64CA](#) [SMBJ12CATR](#) [SMBJ8.0A](#) [SMLJ30CA-TP](#) [ESD101-B1-02ELS E6327](#) [ESD112-B1-02EL E6327](#)
[ESD119B1W01005E6327XTSA1](#) [ESD5V0L1B02VH6327XTSA1](#) [ESD7451N2T5G](#) [19180-510](#) [CPDT-5V0USP-HF](#) [3.0SMCJ33CA-F](#)
[3.0SMCJ36A-F](#) [HSPC16701B02TP](#) [D3V3Q1B2DLP3-7](#) [D55V0M1B2WS-7](#) [DESD5V0U1BL-7B](#) [DRTR5V0U4SL-7](#) [SCM1293A-04SO](#)
[ESD200-B1-CSP0201 E6327](#) [ESD203-B1-02EL E6327](#) [SM12-7](#) [SMF8.0A-TP](#) [SMLJ45CA-TP](#) [CEN955 W/DATA](#) [82350120560](#)
[82356240030](#) [VESD12A1A-HD1-GS08](#) [CPDUR5V0R-HF](#) [CPDUR24V-HF](#) [CPDQC5V0U-HF](#) [CPDQC5V0USP-HF](#) [CPDQC5V0-HF](#)
[D1213A-01LP4-7B](#) [D1213A-02WL-7](#) [ESDLIN1524BJ-HQ](#) [5KP100A](#) [5KP15A](#)