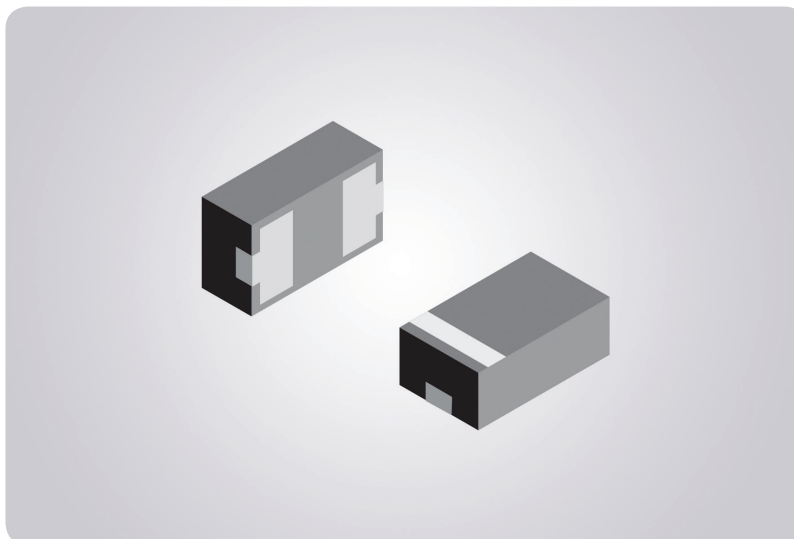


BiSy ESD Diode Offers Extremely Low Capacitance of 0.3 pF in Ultra Compact LLP 1006 Package



KEY BENEFITS

- Very low load capacitance: $C_D = 0.3 \text{ pF}$
- Bidirectional symmetrical
- Ultra compact LLP1006-2M package
- Low package height $< 0.4 \text{ mm}$

APPLICATIONS

- Antenna and BUS port protection from transient voltage signals in portable electronics

RESOURCES

- Datasheet: VBUS05L1-DD1 - www.vishay.com/ppg?81188
- For technical questions contact ESDProtection@vishay.com
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



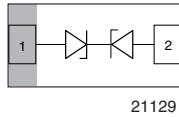
RoHS
COMPLIANT

HALOGEN
FREE

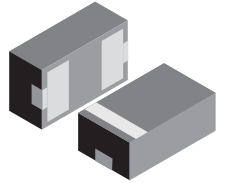
GREEN
(5-2008)

A **WORLD OF**
SOLUTIONS™

BiSy ESD Diode Offers Extremely Low Capacitance of 0.3 pF in Ultra Compact LLP 1006 Package



21129



20855

MARKING (example only)



21121

Bar = pin 1 marking

X = date code

Y = type code (see table below)

DESIGN SUPPORT TOOLS

[click logo to get started](#)


FEATURES

- Ultra compact LLP1006-2M package
- Low package height < 0.4 mm
- 1-line ESD protection
- Working range ± 5.5 V
- Low leakage current $I_R < 0.1$ μ A
- Very low load capacitance $C_D = 0.3$ pF
- ESD immunity acc. IEC 61000-4-2 ± 15 kV contact discharge ± 16 kV air discharge
- 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


RoHS
 COMPLIANT
 HALOGEN
FREE
GREEN
(5-2008)

ORDERING INFORMATION

DEVICE NAME	ORDERING CODE	TAPED UNITS PER REEL (8 mm TAPE ON 7" REEL)	MINIMUM ORDER QUANTITY
VBUS05L1-DD1	VBUS05L1-DD1-G-08	8000	8000

PACKAGE DATA

DEVICE NAME	PACKAGE NAME	TYPE CODE	WEIGHT	MOLDING COMPOUND FLAMMABILITY RATING	MOISTURE SENSITIVITY LEVEL	SOLDERING CONDITIONS
VBUS05L1-DD1	LLP1006-2M	R	0.72 mg	UL 94 V-0	MSL level 1 (according J-STD-020)	Peak temperature max. 260 °C

ABSOLUTE MAXIMUM RATINGS VBUS05L1-DD1

PARAMETER	TEST CONDITIONS	SYMBOL	VALUE	UNIT
Peak pulse current	Acc. IEC 61000-4-5; $t_p = 8/20$ μ s; single shot	I_{PPM}	2	A
Peak pulse power	Pin 1 to pin 2, acc. IEC 61000-4-5; $t_p = 8/20$ μ s; single shot	P_{PP}	34	W
ESD immunity	Contact discharge acc. IEC 61000-4-2; 10 pulses	V_{ESD}	± 15	kV
	Air discharge acc. IEC 61000-4-2; 10 pulses		± 16	kV
Operating temperature	Junction temperature	T_J	-40 to +125	°C
Storage temperature		T_{STG}	-40 to +150	°C

Revision: 04-Jan-2019

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

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