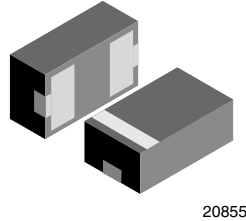
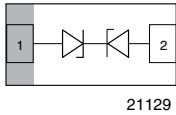




THE DATASHEET OF VCUT03B1-DD1-G-08



Bidirectional Symmetrical (BiSy) Single Line ESD-Protection Diode in LLP1006-2M



MARKING (example only)



Bar = pin 1 marking

X = date code

Y = type code (see table below)

LINKS TO ADDITIONAL RESOURCES



FEATURES

- Ultra compact LLP1006-2M package
- Low package height < 0.4 mm
- 1-line ESD protection
- Working range ± 3.5 V
- Low leakage current < 0.1 μ A
- Low load capacitance $C_D = 12.5$ pF
- ESD immunity acc. IEC 61000-4-2
 ± 18 kV contact discharge
 ± 20 kV air discharge
- Soldering can be checked by standard vision inspection, no X-ray necessary
- Pin plating NiPdAu (e4) no whisker growth
- 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
VCUT03B1-DD1	VCUT03B1-DD1-G-08	8000	8000

PACKAGE DATA

DEVICE NAME	PACKAGE NAME	TYPE CODE	WEIGHT	MOLDING COMPOUND FLAMMABILITY RATING	MOISTURE SENSITIVITY LEVEL	SOLDERING CONDITIONS
VCUT03B1-DD1	LLP1006-2M	N	0.72 mg	UL 94 V-0	MSL level 1 (according J-STD-020)	Peak temperature max. 260 °C

ABSOLUTE MAXIMUM RATINGS VCUT03B1-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}	3.5	A
Peak pulse power	Pin 1 to pin 2 Acc. IEC 61000-4-5; $t_p = 8/20$ μ s; single shot	P_{PP}	40	W
ESD immunity	Contact discharge acc. IEC61000-4-2; 10 pulses	V_{ESD}	± 18	kV
	Air discharge acc. IEC61000-4-2; 10 pulses		± 20	
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.

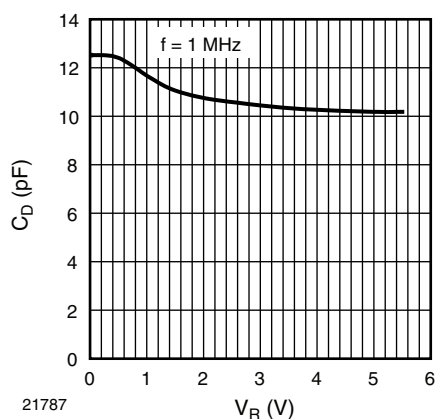
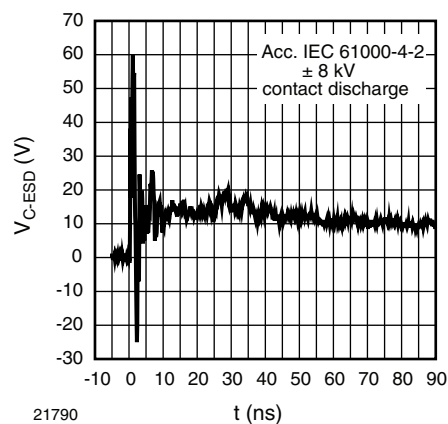
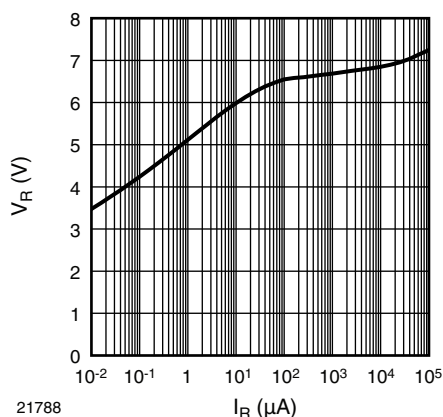
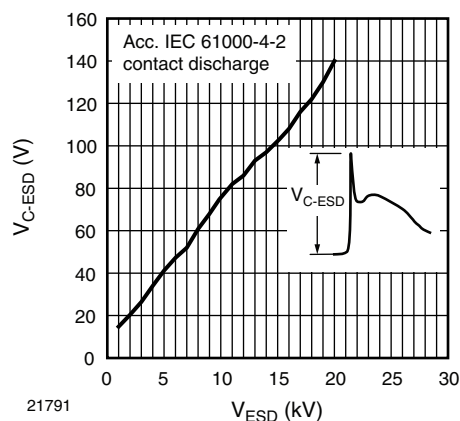
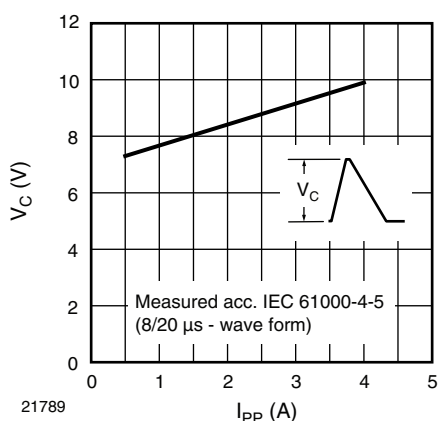
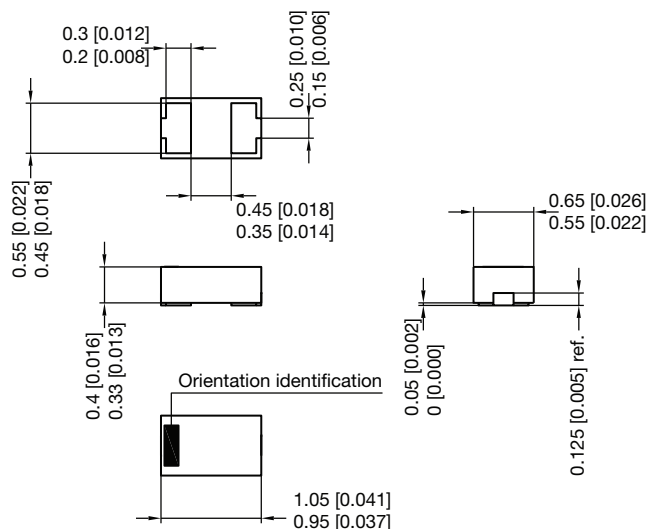

Fig. 3 - Typical Capacitance C_D vs. Reverse Voltage V_R

Fig. 6 - Typical Peak Clamping Voltage V_C vs. Peak Pulse Current I_{PP}

Fig. 4 - Typical Forward Current I_F vs. Forward Voltage V_F


Fig. 7 - Typical Clamping Performance at + 8 kV Contact Discharge (acc. IEC 61000-4-2)

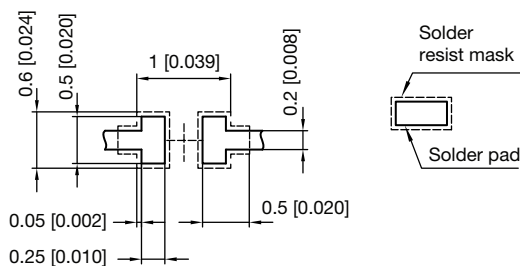

Fig. 5 - Typical Reverse Voltage V_R vs. Reverse Current I_R



PACKAGE DIMENSIONS in millimeters (inches): **LLP1006-2M**

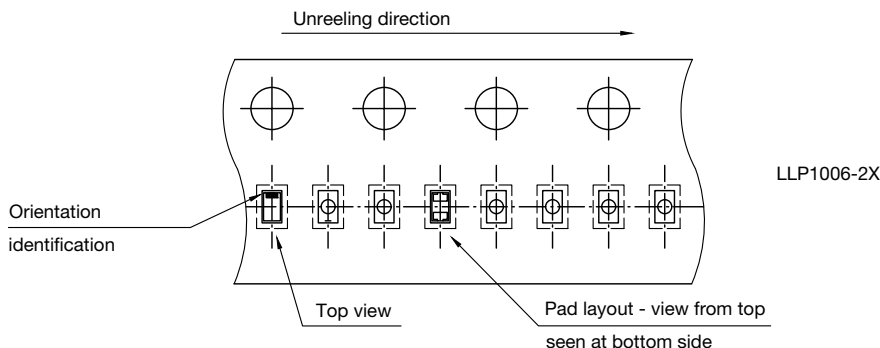


Foot print recommendation:



Pad Design Patented:
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Document no.: S8-V-3906.04-005 (4)
Rev. 7 - Date: 11.May 2016
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S8-V-3906.04-017 (4)
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