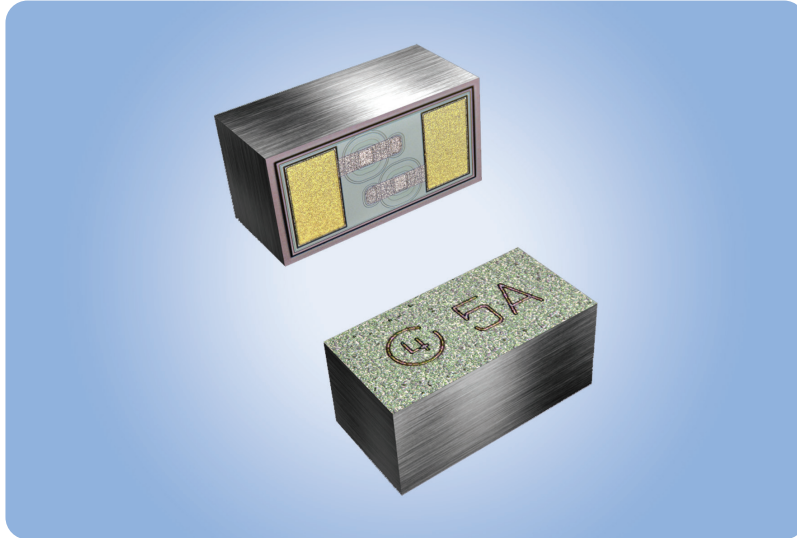


Bidirectional Symmetrical ESD Protection Diode in CLP0603 Package With ± 10 V Working Range



KEY BENEFITS

- Ultra compact CLP0603 package
- Low package height < 0.3 mm
- Single-line bidirectional ESD protection
- Working range: ± 10 V
- Low leakage current < 0.1 μ A
- Low load capacitance $C_D = 7.7$ pF (typical)
- ESD protection per IEC 61000-4-2
 - ± 24 kV contact discharge
 - ± 24 kV air discharge

APPLICATIONS

- ESD protection of high speed interfaces in smartphones, digital cameras, gaming systems, and automotive entertainment systems

RESOURCES

- Datasheet: VCUT10A1-SD0 - www.vishay.com/ppg?85937
- For technical questions contact ESDProtection@vishay.com
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



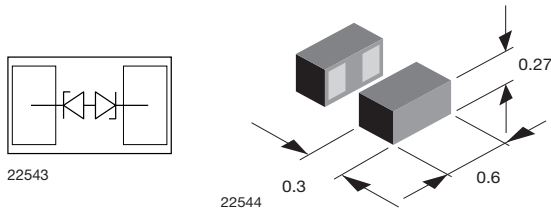
RoHS
COMPLIANT

HALOGEN
FREE

GREEN
(5-2008)

A **WORLD OF**
SOLUTIONS™

Bidirectional Symmetrical (BiSy) Single Line ESD-Protection Diode in Silicon Package



MARKING (example only)



1 = year code
 Open circle = month code and pin 1
 XY = type code

DESIGN SUPPORT TOOLS AVAILABLE



FEATURES

- Ultra compact CLP0603-2L package
- Low package height < 0.3 mm
- 1-line ESD-protection
- Working range ± 10 V
- Low leakage current < 0.1 μ A
- Low load capacitance $C_D = 7.7$ pF (typ.)
- ESD-protection acc. IEC 61000-4-2 ± 24 kV contact discharge ± 24 kV air discharge
- Lead plating: Au (e4)
- Lead material: Ni
- Topside coating
- e4 - precious metal (e.g. Ag, Au, NiPd, NiPdAu) (no Sn)
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



ORDERING INFORMATION				
PART NUMBER (EXAMPLE)	ENVIRONMENTAL AND QUALITY CODE		PACKAGING CODE	ORDERING CODE (EXAMPLE)
	RoHS-COMPLIANT + LEAD (Pb)-FREE TERMINATIONS	GOLD PLATED	15K PER 7" REEL (8 mm TAPE) 15K/BOX = MOQ	
	GREEN			
VCUT10A1-SD0-	G	4	-08	VCUT10A1-SD0-G4-08

PACKAGE DATA				
DEVICE NAME	PACKAGE NAME	TYPE CODE	WEIGHT	SOLDERING CONDITIONS
VCUT10A1-SD0	CLP0603-2L	10	0.12 mg	Peak temperature max. 260 °C Reflow soldering according JEDEC® STD-020

ABSOLUTE MAXIMUM RATINGS				
PARAMETER	TEST CONDITIONS	SYMBOL	VALUE	UNIT
Peak pulse current	acc. IEC 61000-4-5, 8/20 μ s/single shot	I_{PPM}	4	A
Peak pulse power	Pin 1 to pin 2 acc. IEC 61000-4-5; $t_p = 8/20$ μ s; single shot	P_{PP}	72	W
ESD immunity	Contact discharge acc. IEC 61000-4-2; 10 pulses	V_{ESD}	± 24	kV
	Air discharge acc. IEC 61000-4-2; 10 pulses		± 24	
Operating temperature	Junction temperature	T_J	-55 to +150	°C
Storage temperature		T_{stg}	-55 to +150	°C

Revision: 17-May-2019