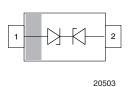


Low Capacitance, Single-Line ESD-Protection Diode in SOD-323





MARKING (example only)



XYZ = type code (see table below) bar = pin 1

FEATURES

- For LIN-Bus applications
- Small SOD-323 package
- 1-line ESD-protection
- Working range: ± 26.5 V
- Low leakage current I_R < 0.05 μA
- Low load capacitance C_D < 16 pF
- ESD-protection acc. IEC 61000-4-2
 ± 30 kV contact discharge
 - ± 30 kV air discharge
- ESD capability according to AEC-Q101: human body model: class H3B: > 8 kV
- e3 pins plated with tin (Sn)
- AEC-Q101 qualified available
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

ORDERING INFORMATION									
PART NUMBER (EXAMPLE)	ENVIRONMENTAL AND QUALITY CODE				PACKAG	ING CODE			
	AEC-Q101 QUALIFIED	Rohs-Compliant + Lead (Pb)-Free Terminations		TIN PLATED	3K PER 7" REEL (8 mm TAPE)	10K PER 13" REEL (8 mm TAPE)	ORDERING CODE (EXAMPLE)		
		STANDARD	GREEN	PLATED	15K/BOX = MOQ	10K/BOX = MOQ			
VLIN2626-02G	-	Е	-	3	-08	-	VLIN2626-02G-E3-08		
VLIN2626-02G	Н	E	-	3	-08	-	VLIN2626-02GHE3-08		
VLIN2626-02G	-	Е	-	3	-	-18	VLIN2626-02G-E3-18		
VLIN2626-02G	Н	Е	-	3	-	-18	VLIN2626-02GHE3-18		

PACKAGE DATA								
DEVICE NAME	PACKAGE NAME	TYPE CODE	WEIGHT	MOLDING COMPOUND FLAMMABILITY RATING	MOISTURE SENSITIVITY LEVEL	SOLDERING CONDITIONS		
VLIN2626-02G	SOD-323	262	4.30 mg	UL 94 V-0	MSL level 1 (according J-STD-020)	Peak temperature max. 260 °C		

ABSOLUTE MAXIMUM RATINGS							
PARAMETER	TEST CONDITIONS	SYMBOL	VALUE	UNIT			
Peak pulse current	$T_A = 25$ °C; acc. IEC 61000-4-5; $t_p = 8/20~\mu s$; single shot	I _{PPM}	4	Α			
Peak pulse power	$T_A = 25$ °C; acc. IEC 61000-4-5; $t_p = 8/20~\mu s$; single shot	P _{PP}	200	W			
ESD immunity	Contact discharge acc. IEC 61000-4-2; 10 pulses; T _A = 25 °C		± 30	kV			
	Air discharge acc. IEC 61000-4-2; 10 pulses; T _A = 25 °C	- V _{ESD}	± 30	kV			
Operating temperature	Junction temperature	TJ	-55 to +150	°C			
Storage temperature		T _{STG}	-55 to +150	°C			

ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishav.com/doc?91000

ELECTRICAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified)								
PARAMETER	TEST CONDITIONS / REMARKS	SYMBOL	MIN.	TYP.	MAX.	UNIT		
Protection paths	Number of lines which can be protected	N _{channel}	-	-	1	lines		
Reverse stand-off voltage	Max. reverse working voltage	V_{RWM}	-	-	26.5	V		
Reverse voltage	At $I_R = 0.05 \mu A$	V_R	26.5	-	-	V		
Reverse current	At V _{RWM} = 26.5 V	I _R	-	-	0.05	μΑ		
Reverse breakdown voltage	At I _R = 1 mA	V_{BR}	28	30	32	V		
Reverse clamping voltage	At I_{PP} 1 A; $t_p = 8/20 \mu s$	V _C	-	32	40	V		
	At $I_{PP} = I_{PPM} = 4 \text{ A}$; $t_p = 8/20 \mu\text{s}$	V _C	-	39	50	V		
Capacitance	At $V_R = 0 V$, $f = 1 MHz$	C _D	ı	13.5	16	pF		

TYPICAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)

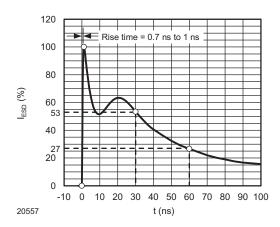


Fig. 1 - ESD Discharge Current Wave Form acc. IEC 61000-4-2 (330 Ω / 150 pF)

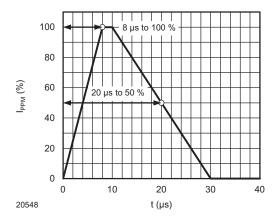


Fig. 2 - 8/20 µs Peak Pulse Current Wave Form acc. IEC 61000-4-5

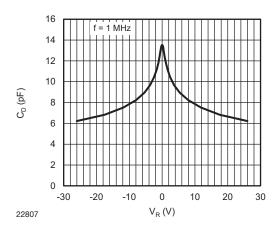


Fig. 3 - Typical Capacitance C_{D} vs. Reverse Voltage V_{R}

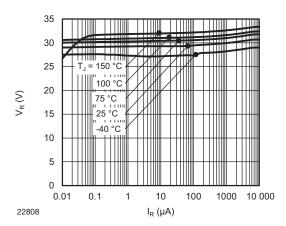
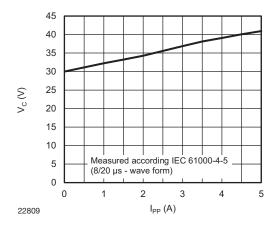
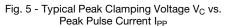


Fig. 4 - Typical Reverse Voltage V_{R} vs. Reverse Current I_{R}







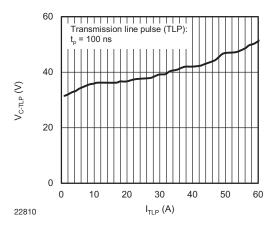
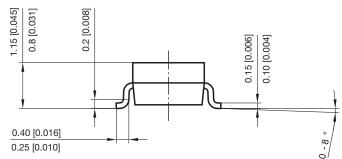
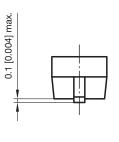
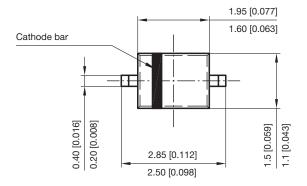


Fig. 6 - Typical Clamping Voltage $V_{C\text{-}TLP}$ vs. Pulse Current I_{TLP}

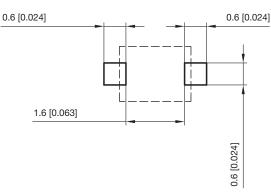
PACKAGE DIMENSIONS in millimeters (inches) SOD-323







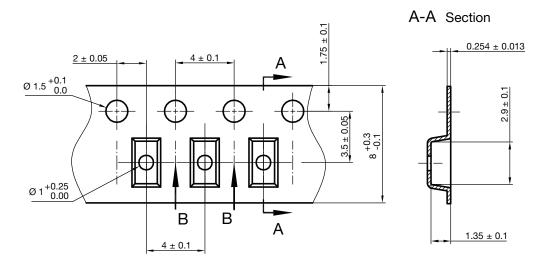
Foot print recommendation:



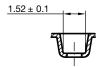
Document no.: S8-V-3910.02-001 (4) Created - Date: 24.August.2004 Rev. 5 - Date: 23.Sept.2009

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CARRIER TAPE SOD-323

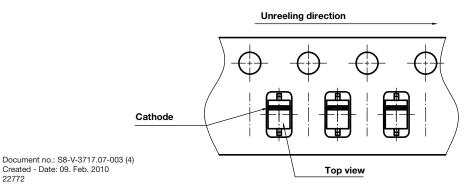


B-B Section



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ORIENTATION IN CARRIER TAPE SOD-323





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