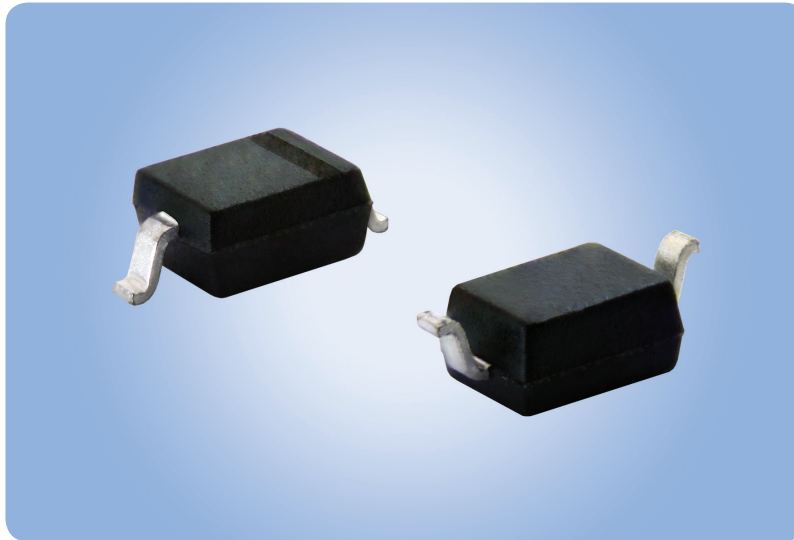




DIODES

VLIN1626-02G and VLIN2626-02G

Bidirectional Single-Line ESD Protection Diodes in Small SOD-323 Package Save Board Space in Automotive Applications



KEY BENEFITS

- Low load capacitance of 15.5 pF typical and 18 pF maximum
- Compact SOD-323 package measures only 1.95 mm x 1.5 mm with low 0.95 mm profile
- Low maximum leakage current of < 0.05 μ A
- AEC-Q101 qualified
- Lead (Pb)-free and RoHS-compliant

APPLICATIONS

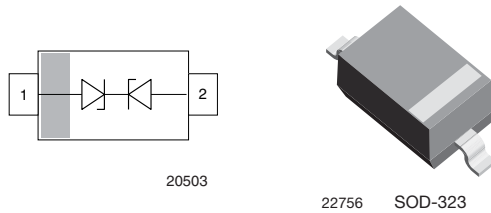
- Protection of data lines against transient voltage signals (LIN-Bus protection) in automotive applications

RESOURCES

- Datasheet: VLIN1626-02G - www.vishay.com/ppg?85902,
VLIN2626-02G - www.vishay.com/ppg?85915
- For technical questions contact ESDProtection@vishay.com
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



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
- Working range: -16 V; +26.5 V
- Low leakage current $I_R < 0.05 \mu\text{A}$
- Low load capacitance $C_D < 18 \text{ pF}$
- ESD-protection acc. IEC 61000-4-2
 $\pm 30 \text{ kV}$ contact discharge
 $\pm 30 \text{ kV}$ air discharge
- ESD capability according to AEC-Q101:
human body model: class H3B: $> 8 \text{ kV}$
- e3 - pins plated with tin (Sn)
- 1-line ESD-protection
- AEC-Q101 qualified available
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT

ORDERING INFORMATION

PART NUMBER (EXAMPLE)	ENVIRONMENTAL AND QUALITY CODE			PACKAGING CODE		ORDERING CODE (EXAMPLE)	
	AEC-Q101 QUALIFIED	RoHS-COMPLIANT + LEAD (Pb)-FREE TERMINATIONS		TIN PLATED	3K PER 7" REEL (8 mm TAPE) 15K/BOX = MOQ		10K PER 13" REEL (8 mm TAPE) 10K/BOX = MOQ
		STANDARD	GREEN				
VLIN1626-02G	-	E	-	3	-08	-	VLIN1626-02G-E3-08
VLIN1626-02G	H	E	-	3	-08	-	VLIN1626-02GHE3-08
VLIN1626-02G	-	E	-	3	-	-18	VLIN1626-02G-E3-18
VLIN1626-02G	H	E	-	3	-	-18	VLIN1626-02GHE3-18

PACKAGE DATA

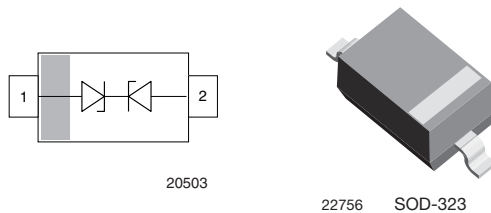
DEVICE NAME	PACKAGE NAME	TYPE CODE	WEIGHT	MOLDING COMPOUND FLAMMABILITY RATING	MOISTURE SENSITIVITY LEVEL	SOLDERING CONDITIONS
VLIN1626-02G	SOD-323	6A1	4.30 mg	UL 94 V-0	MSL level 1 (according J-STD-020)	Peak temperature max. 260 °C

ABSOLUTE MAXIMUM RATINGS

PARAMETER	TEST CONDITIONS	SYMBOL	VALUE	UNIT
Peak pulse current	Pin 1 to pin 2; $T_A = 25 \text{ °C}$, acc. IEC 61000-4-5; $t_p = 8/20 \mu\text{s}$; single	I_{PPM}	6	A
	Pin 2 to pin 1; $T_A = 25 \text{ °C}$, acc. IEC 61000-4-5; $t_p = 8/20 \mu\text{s}$; single		4	
Peak pulse power	$T_A = 25 \text{ °C}$, acc. IEC 61000-4-5; $t_p = 8/20 \mu\text{s}$; single shot	P_{PP}	200	W
ESD immunity	Contact discharge acc. IEC 61000-4-2; 10 pulses, $T_A = 25 \text{ °C}$	V_{ESD}	± 30	kV
	Air discharge acc. IEC 61000-4-2; 10 pulses, $T_A = 25 \text{ °C}$		± 30	
Operating temperature	Junction temperature	T_J	-55 to +150	°C
Storage temperature		T_{STG}	-55 to +150	

Revision: 23-Feb-2016

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 $I_R < 0.05 \mu\text{A}$
- 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



RoHS
COMPLIANT

ORDERING INFORMATION

PART NUMBER (EXAMPLE)	ENVIRONMENTAL AND QUALITY CODE			PACKAGING CODE		ORDERING CODE (EXAMPLE)	
	AEC-Q101 QUALIFIED	RoHS-COMPLIANT + LEAD (Pb)-FREE TERMINATIONS		TIN PLATED	3K PER 7" REEL (8 mm TAPE) 15K/BOX = MOQ		10K PER 13" REEL (8 mm TAPE) 10K/BOX = MOQ
		STANDARD	GREEN				
VLIN2626-02G	-	E	-	3	-08	-	VLIN2626-02G-E3-08
VLIN2626-02G	H	E	-	3	-08	-	VLIN2626-02GHE3-08
VLIN2626-02G	-	E	-	3	-	-18	VLIN2626-02G-E3-18
VLIN2626-02G	H	E	-	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; $t_p = 8/20$ μs ; single shot	I_{PPM}	4	A
Peak pulse power	$T_A = 25$ °C; acc. IEC 61000-4-5; $t_p = 8/20$ μs ; single shot	P_{PP}	200	W
ESD immunity	Contact discharge acc. IEC 61000-4-2; 10 pulses; $T_A = 25$ °C	V_{ESD}	± 30	kV
	Air discharge acc. IEC 61000-4-2; 10 pulses; $T_A = 25$ °C		± 30	kV
Operating temperature	Junction temperature	T_J	-55 to +150	°C
Storage temperature		T_{STG}	-55 to +150	°C

Revision: 23-Feb-2016