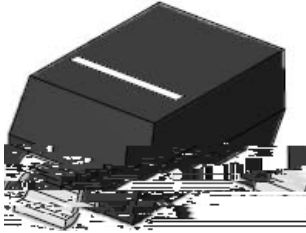
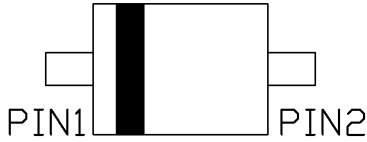
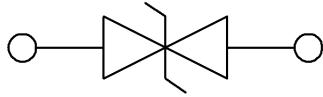


LIN bus ESD protection diode



SOD323

UNIT

Features

ability rating and halogen free

- Moisture Sensitivity Level 1
- Protects One Data Line of LIN
- Max Peak Pulse Power 160 W (tp=8/20 us)
- Low Clamping Voltage
- IEC 61000-4-2 level 4 (ESD)
- Part no. with suffix "Q" means AEC-Q101 qualified

Applications

Automotive LIN-bus protection
Asymmetrical diode configuration ensures an optimized protection against ElectroMagnetic Interferences (EMI) of a LIN Electronic Control Unit (ECU)

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and > ESD22 ! B1 \$ 2

			VALUE
Peak Pulse Power per Line (tp=8/20 us) Note1	P_{PP}	W	160
Peak Pulse Current per Line (tp=8/20 us) Pin1 to Pin2 Note1	I_{PP}	A	5
Peak Pulse Current per Line (tp=8/20 us) Pin2 to Pin1 Note1			3
Storage Temperature Range	T_{stg}	°C	-55~+150
Junction Temperature	T_J	°C	-55~+150
Human Body Model HBM		KV	10
	V_{ESD}		

Note1 Non-repetitive current pulse 8/20 μ s exponential decay waveform according to IEC 61000-4-5.



ESDLIN1524D3Q

Electrical Characteristics (Ta=25 unless otherwise noted)

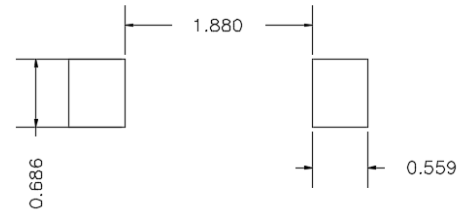
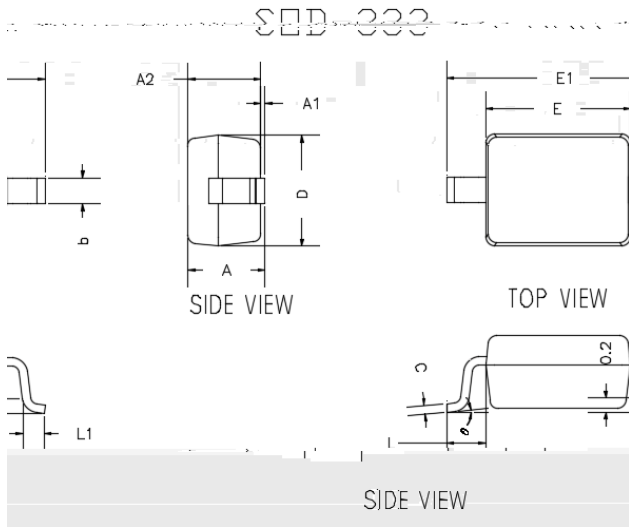
Item	Symbol	Unit		Min	Typ	
Reverse Working Voltage	V_{RWM}	V	Pin1 to Pin2 (15V)	-		15
			Pin2 to Pin1 (24V)			24
Reverse Breakdown Voltage	V_{BR}	V	$I_T=1mA$ Pin1 to Pin2 (15V)	17.1		20.3
			$I_T=1mA$ Pin2 to Pin1 (24V)	25.4		30.3
Reverse Leakage Current	I_R	nA	$V_{RWM}=15V$ Pin1 to Pin2 (15V)	-		50
			$V_{RWM}=24V$ Pin2 to Pin1 (24V)	-		50
Clamping Voltage (8/20us Pulse)	V_C	V	$I_{PP}=1A$ Pin1 to Pin2 (15V)	-		25
			$I_{PP}=5A$ Pin1 to Pin2 (15V)	-		35
	V_C	V	$I_{PP}=1A$ Pin2 to Pin1 (24V)	-		40
			$I_{PP}=3A$ Pin2 to Pin1 (24V)	-		50
Junction Capacitance	C_j	pF	$V_{BR}=0V$ $f=1MHZ$ Pin1 to Pin2 (15V)	-		30
			$V_{BR}=0V$ $f=1MHZ$ Pin2 to Pin1 (24V)	-		30

Ordering Information



ESDLIN1524D3Q

Outline Dimensions



UNIT: mm

SUGGESTED SOLDER PAD LAYOUT

DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	---	0.0393	---	1.0000
A1	0.0000	0.0039	0.0000	0.1000
A2	0.0314	0.0354	0.8000	0.9000
b	0.0098	0.0157	0.2500	0.4000
c	0.0031	0.0051	0.0800	0.1300
E	0.0629	0.0709	1.6000	1.8000
E1	0.3984	0.1063	2.5000	2.7000
L	0.0187TYP		0.475TYP	
L1	0.0098	0.0157	0.250	0.400
e	c*	8*	c*	8*

Marking Information



Note:

1. All marking is at middle of the product body
2. All marking is in laser marking
3. AM is Marking Code
4. Body color: Black

