

New Product Announcement 74LVC1G3157

74LVC1G3157 Single-Pole Double-Throw Analog Switch

The 74LVC1G3157 is a singlepole double-throw analog switch used for routing analog or digital signals.

Features

Low ON-State Resistance

- 6Ω with $V_{CC} = 4.5V$
- 6.5Ω with V_{CC} = 3.3V
 7.5Ω with V_{CC} = 2.7V

Low OFF-State Leakage

- 50 nA typical at 25°C
- 1 µA maximum at 85°C

Schmitt Trigger on Control Pin

- Rejects noisy signals
- Tolerant of Slow rise/fall times
- Hysteresis typically 250 mV

Break Before Make Switching

- Maintains Isolation of input signals
- Glitch-free behavior

Packages

- SOT363
- X2-DFN1410-6



The Diodes Advantage

Low ON-state Resistance

Parts are well suited for routing analog or digital signals in batterydriven, handheld applications such as cell phones, tablets, E-readers, games, cameras, music players, wearables, netbooks, and notebooks.

Noise Rejection Circuitry at Select Pin

The select pin includes a small amount of input hysteresis making it less susceptible to problems from slow rising or falling signals.

Popular Packages

The X2-DFN1410-6 at 1.4mm x 1.00mm x 0.4mm is useful in the smaller size end-equipment. The SOT363 is available for applications where the larger lead pitch and ease of soldering may be required.

www.diodes.com



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74LVC1G3157 Cross Reference

Diodes Device	Package	ТІ	NXP	Fairchild	ST
74LVC1G3157DW-7	SOT-363	SN74LVC1G3157DCKR	74LVC1G3157GW,125	FSA3157P6X	STG3157CTR
74LVC1G3157FZ4-7	X2-DFN1410-6	SN74LVC1G3157DRYR	74LVC1G3157GM,115	NC7SB3157L6X	

Product Information



ON resistance vs. Input Voltage 40 30 C_{C}^{5} 20 10 0 0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 $V_{1}(V)$

Signal path is set by Select Pin.

Once the path is selected it has the ON-resistance properties per the graph to the right.

Diodes 74LVC1G3157 has lower ON-resistance than competitor parts in many applications.

Package Information

Package	Width (nominal)	Length (nominal)	Height (maximum)	Lead Pitch (nominal)
X2-DFN14106	1.0 mm	1.4 mm	0.40 mm	0.50 mm
SOT363	2.0 mm	2.0 mm	1.1 mm	0.65 mm

• The 74LVC1G3157 Analog Switch is a part of Diodes' 74LVC1G Single Gate Logic Family

• The 74LVC1G family <u>www.diodes.com/catalog/single_gate_148/</u> now includes functions:

- 00, 02, 04, 06, 07, 08, 10, 11, 14, 17, 32, 34, 57, 58, 86, 97, 98, 125, 126, and 3157
 The 74LVC1G family operates from 1.65 to 5.5V
- The 74LVC1G3157 datasheet is located at http://www.diodes.com/files/datasheets/74LVC1G3157.pdf

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