

DIO1523

0.75 Ω, Ultra Low On-Resistance Dual, SPDT Analog Switch

Features

- Switch Type: SPDT(2X)
- Voltage Operation: 1.8V to 4.2V
- Ultra-Low On Resistance: 0.75Ω @ +4.2V
- -3dB Bandwidth: 40MHz
- High Off-isolation: -78dB@100kHz
- Low Crosstalk: -103dB@100kHz
- Excellent On Resistance Matching: 0.04Ω
- Low Total Harmonic Distortion (THD)
- Rail-to-Rail Input and Output Operation
- Break-Before-Make Switching
- Green Packaged: 10-DQFN
- 8kV HBM ESD

Descriptions

The DIO1523 is a dual Single-Pole, Double-Throw (SPDT) analog switch. DIO1523 operates from a single 1.8V to 4.2V supply and features an ultra-low on resistance of 0.75Ω at a +4.2V supply and $T_A = 25^\circ\text{C}$. This device is fabricated with sub-micron CMOS technology to achieve fast switching speeds and is designed for break-before-make operation.

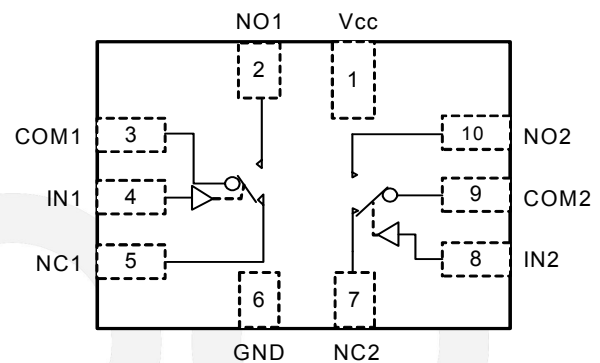
DIO1523 guarantees 0.04Ω on-resistance matching between switches, on-resistance flatness over the signal range, high off-isolation and low crosstalk, which ensures excellent linearity and low distortion when switching audio signals. DIO1523 consists of two normally open and two normally close switches.

DIO1523 provides packages with Green 10-lead DQFN

Applications

- Cell-Phone/PDA
- MP3/MP4/PMP
- Portable Instrumentation
- Battery Powered Communications
- Computer Peripherals

Block Diagram



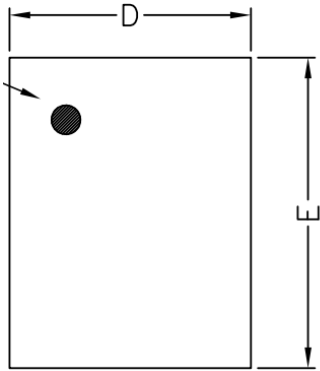
Ordering Information

Order Part Number	Top Marking		T_A	Package	
DIO1523LP10	YWGZ	Green	-40 to +85°C	DQFN-10	Tape & Reel, 3000

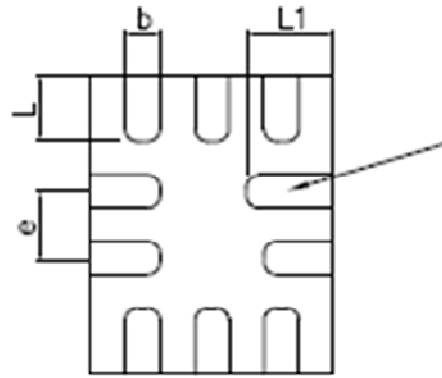
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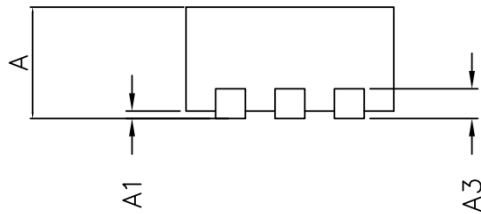
Physical Dimensions: DQFN-10



TOP VIEW



BOTTOM VIEW



COMMON DIMENSIONS(MM)			
PKG.	UT:ULTRA THIN		
	MIN	NOM	MAX
REF			
A	0.50	0.55	0.60
A1	0.00	--	0.05
A3	0.15REF.		
D	1.35	1.40	1.45
E	1.75	1.80	1.85
b	0.15	0.20	0.25
L	0.30	0.40	0.50
L1	0.40	0.50	0.60
e	0.40BSC		

CONTACT US

Dioo is a professional design and sales corporation for high-quality and performance analog semiconductors. The company focuses on industry markets, such as, cell phone, handheld products, laptop, and medical equipments and so on. Dioo's product families include analog signal processing and amplifying, LED drivers and charger IC. Go to <http://www.dioo.com> for a complete list of Dioo product families.

For additional product information, or full datasheet, please contact with our Sales Department or Representatives.