

DIO3212

High-bandwidth and Low on-resistance Analog Switch

Features

- Over-Voltage Tolerance (OVT)
- Voltage Operation: 2.3V to 4.3V
- Low On Resistance: 3.6Ω typ at 3.0Vcc
- High Off-Isolation
- Low Crosstalk
- Low Con: 5pF
- Low power consumption
- Wide -3dB Bandwidth
- Low Distortion
- Green Packaged: QFN10, MSOP10 and DFN10
- 2KV CDM ESD Rating; 8kV I/O to GND HBM ESD Rating

Applications

- Cell Phones
- PDAs and MP3s
- Portable Instrumentation
- Battery Powered Communications
- Computer Peripherals

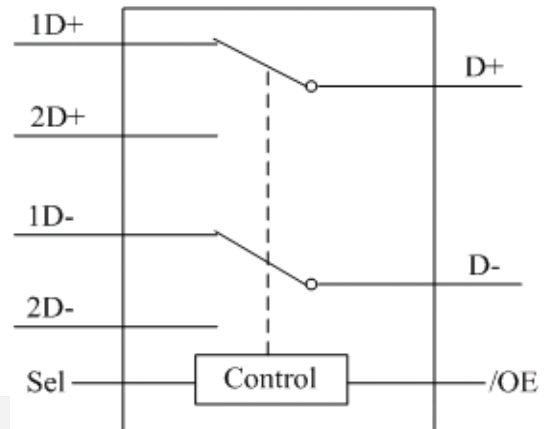
Descriptions

The DIO3212 is a low power, dual SPDT 2-port high-speed analog switch. It handles bi-directional signal flow and is optimized for switching a high-speed (480Mbps) source.

DIO3212 has high channel-to-channel noise isolation and low bit-to-bit skew which allows it to pass high-speed differential signals with good signal integrity. Each switch offers little or no attenuation of the high-speed signals at the outputs.

The DIO3212 contains special circuitry on the D+/D- pins, which can tolerate up to 5.25V when the USB devices are either powered off or powered on.

Block Diagram



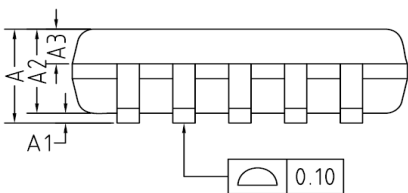
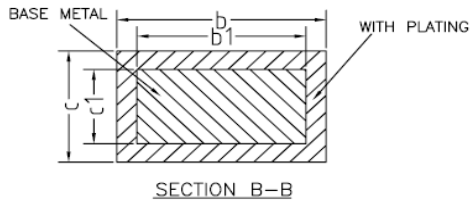
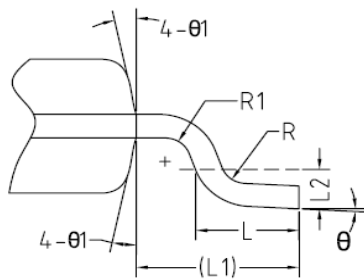
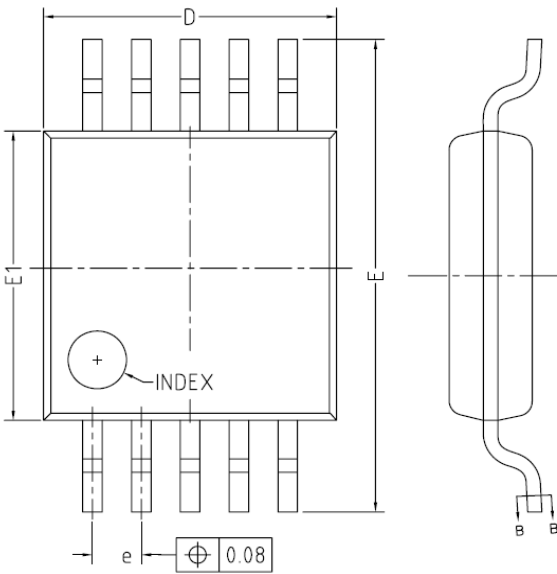
Ordering Information

Order Part Number	Top Marking		T _A	Package	
DIO3212QN10	YWGZ	Green	-40 to +85°C	QFN-10(1.5*2.0*0.55mm)	Tape & Reel, 3000
DIO3212DN10	D3212	Green	-40 to +85°C	DFN-10(3.0*3.0*0.75mm)	Tape & Reel, 5000
DIO3212MP10	DIO3212	Green	-40 to +85°C	MSOP-10	Tape & Reel, 3000

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Physical Dimensions: MSOP-10



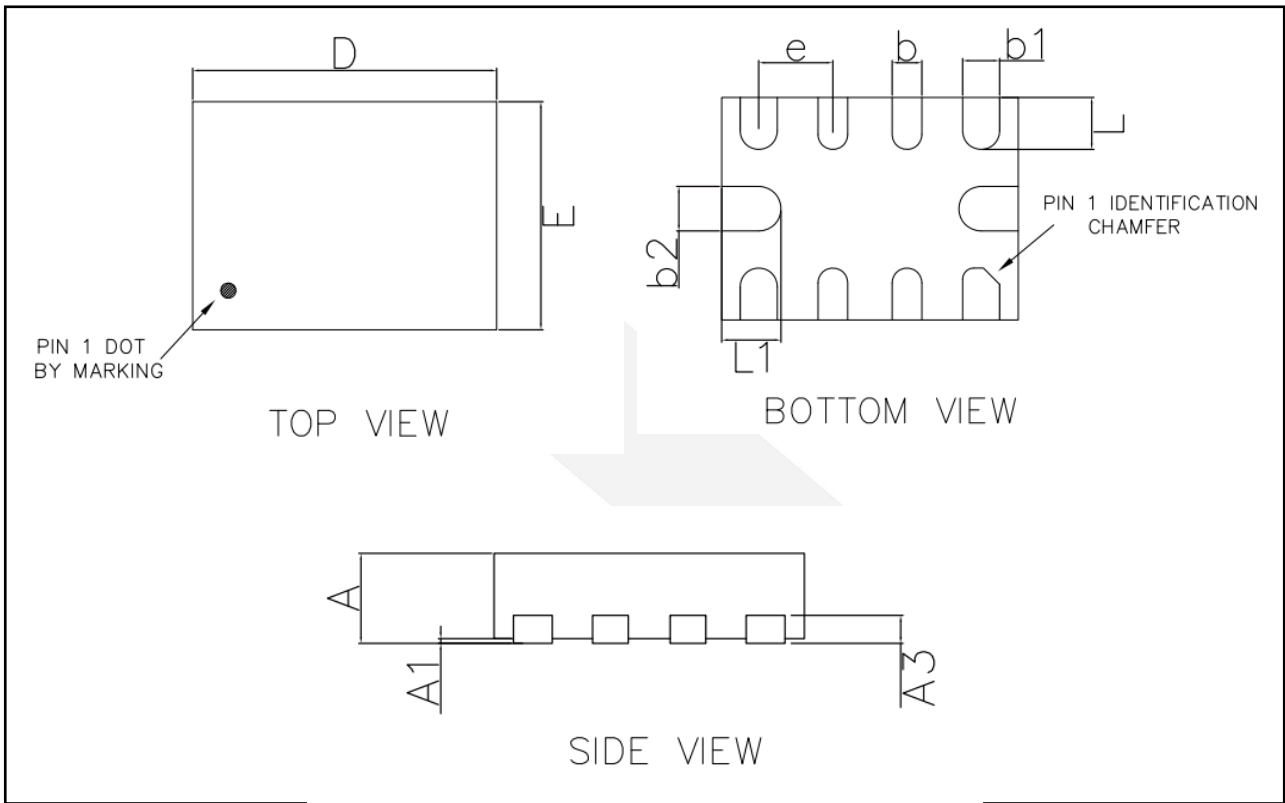
Symbol	Min	Typ	Max
A	-	-	1.10
A1	0	-	0.15
A2	0.75	0.85	0.95
A3	0.25	0.35	0.39
b	0.18	-	0.27
b1	0.17	0.20	0.23
c	0.15	-	0.20
c1	0.14	0.15	0.16
D	2.90	3.00	3.10
E	4.70	4.90	5.10
E1	2.90	3.00	3.10
e	0.40	0.50	0.60
L	0.40	0.60	0.80
L1	0.95REF		
L2	0.25BSC		
R	0.07	-	-
R1	0.07	-	-
θ	0°	-	8°
θ1	9°	12°	15°

COMMON DIMENSIONS
UNITS OF MEASURE=MILLIMETER

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Physical Dimensions: QFN-10 (1.5*2.0*0.55mm)



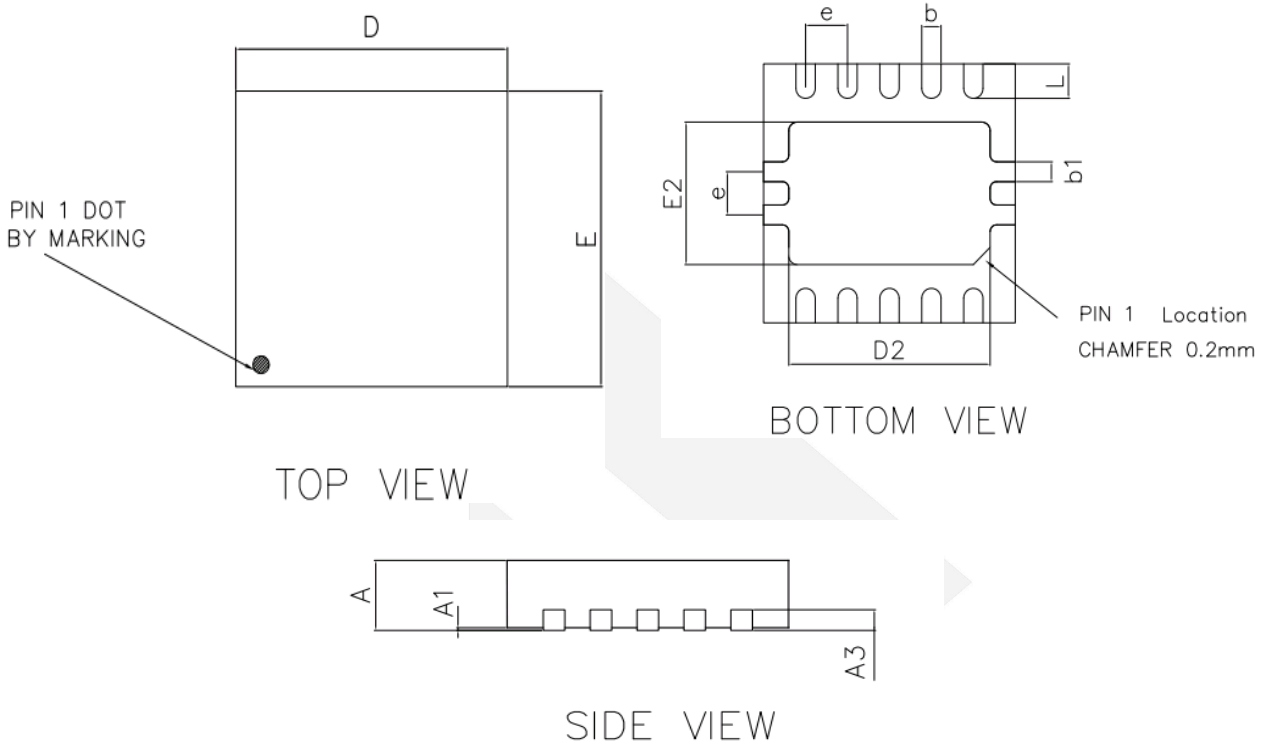
COMMON DIMENSIONS(MM)

PKG.	UT:ULTRA THIN		
	REF.	MIN.	NOM
A	0.50	0.55	0.60
A1	0.00		0.05
A3	0.15REF.		
D	1.95	2.00	2.05
E	1.45	1.50	1.55
b	0.15	0.20	0.25
b1	0.20	0.25	0.30
b2	0.25	0.30	0.35
L	0.30	0.35	0.40
L1	0.35	0.40	0.45
e	0.50 BSC		

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Physical Dimensions: DFN-10 (3.0*3.0*0.75mm)



COMMON DIMENSIONS(MM)

PKG.	UT: Very Very THIN		
REF.	MIN.	NOM	MAX
A	0.70	0.75	0.80
A1	0.00		0.05
A3	0.20REF.		
D	2.85	3.00	3.15
E	2.85	3.00	3.15
D2	2.30	2.40	2.50
E2	1.55	1.65	1.75
b	0.18	0.23	0.30
b1	0.18	0.23	0.30
L	0.30	0.40	0.50
e	0.50 BSC		

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.

