



DIO2543

Three-Channel, 9.5MHz, 6th-Order Standard Definition Video Filter

Features

- Triple 6th-order 9.5MHz SD filters
- 6dB Output Driver Gain and Drive Dual Video Load
- Transparent Input Clamping
- AC or DC Coupled Inputs
- AC or DC Coupled Outputs
- Operates from 3.135V to 5.5V
- Single Power Supply
- Low Power 24mA Typical Supply Current
- RoHS or Green SOIC-8 and MSOP-8 Package
- 8kV ESD protection

Applications

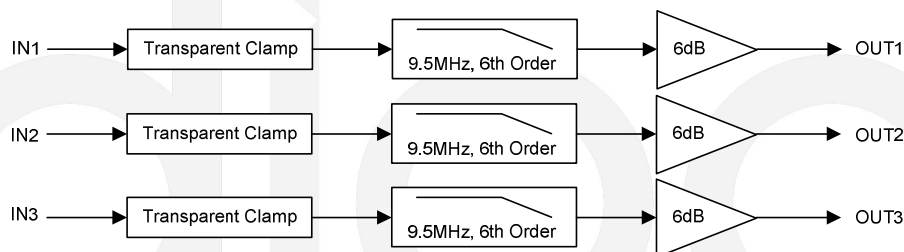
- DVD Players
- Video Amplifiers
- Cable set-top boxes
- Personal Video Recorders
- Communications Devices
- Video on Demand

Descriptions

DIO2543 is a low voltage, triple video amplifier with integrated reconstruction filter and input clamps. DIO2543 provides improved image quality compared with passive LC filters and discrete drivers solution, especially suited for standard definition video signals, such as television and set-top box applications.

DIO2543 can be directly driven by a DC-coupled DAC output or an AC-coupled signal. Internal diode clamps and bias circuitry may be used if AC-coupled inputs are required. The output in DIO2543 can also drive AC or DC coupled single (150Ω) or dual (75Ω) loads. The DC coupling capacitors can be removed.

Block Diagram



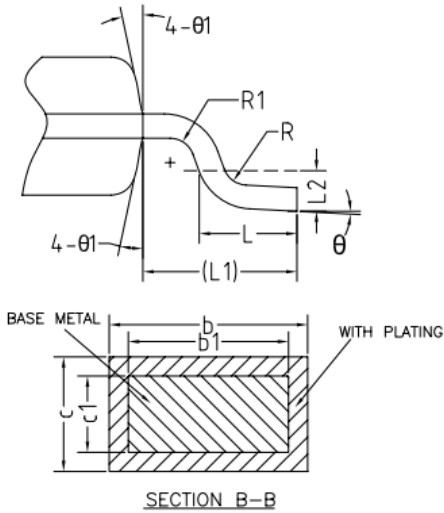
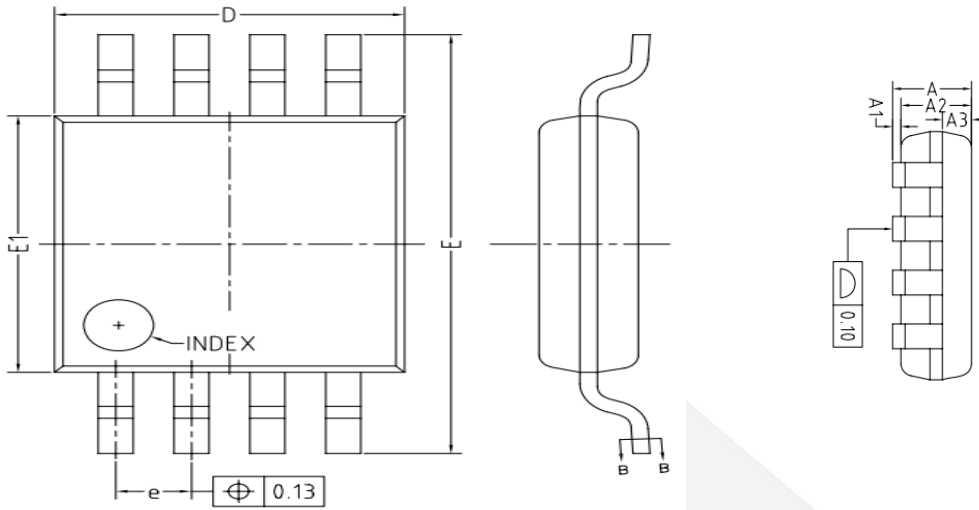
Ordering Information

Order Part Number	Top Marking		T _A	Package	
DIO2543MP8	DIO2543	RoHS/Green	-40 to +85°C	MSOP-8	Tape & Reel, 3000
DIO2543SO8	DIO2543	RoHS/Green	-40 to +85°C	SOIC-8	Tape & Reel, 2500

DIO2543

Three-Channel, 9.5MHz, 6th-Order Standard Definition Video Filter

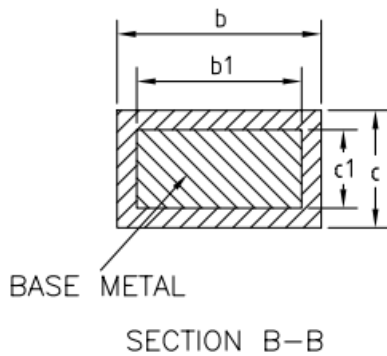
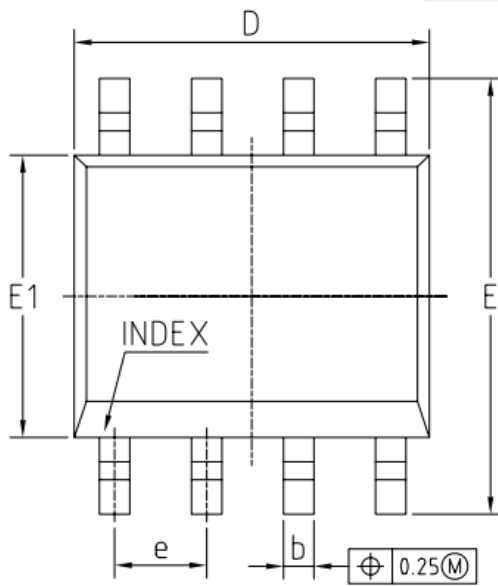
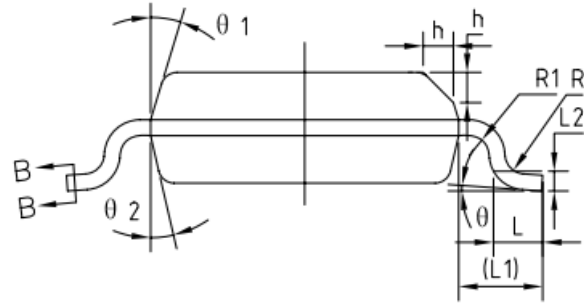
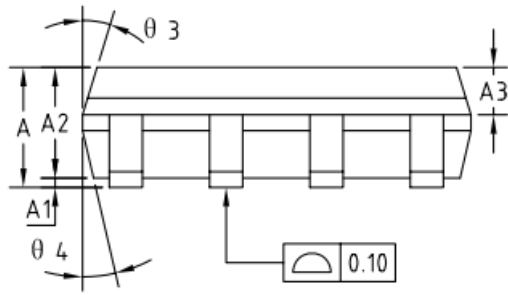
Physical Dimensions: MSOP-8



COMMON DIMENSIONS (UNITS OF MEASURE=MILLIMETER)			
Symbol	MIN	NOM	MAX
A	-	-	1.10
A1	0	-	0.15
A2	0.75	0.85	0.95
A3	0.25	0.35	0.39
b	0.28	-	0.37
b1	0.27	0.30	0.33
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	0.55	0.65	0.75
L	0.45	0.60	0.80
L1	0.95REF		
L2	0.25BSC		
R	0.07	-	-
R1	0.07	-	-
θ	0°	-	8°
θ1	9°	12°	15°

DIO2543

Physical Dimensions: SOIC-8



COMMON DIMENSIONS (UNITS OF MEASURE=MILLIMETER)			
Symbol	MIN	NOM	MAX
A	1.35	1.55	1.75
A1	0.10	0.15	0.25
A2	1.25	1.40	1.65
A3	0.50	0.60	0.70
b	0.38	-	0.51
b1	0.37	0.42	0.47
c	0.17	-	0.25
c1	0.17	0.20	0.23
D	4.80	4.90	5.00
E	5.80	6.00	6.20
E1	3.80	3.90	4.00
e	1.27BSC		
L	0.45	0.60	0.80
L1	1.04REF		
L2	0.25BSC		
R	0.07	-	-
R1	0.07	-	-
h	0.30	0.40	0.50
θ	0°	-	8°
θ1	15°	17°	19°
θ2	11°	13°	15°
θ3	15°	17°	19°
θ4	11°	13°	15°

Three-Channel, 9.5MHz, 6th-Order Standard Definition Video Filter

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.



dioo