



DIO2583

Low-Cost, 3-Channel, SD/ED/HD1080i/1080p Video Filter

Features

- Three channel 6th-order video filter with bandwidth 10MHz, 17MHz, 40MHz, or 60MHz selectable for SD/ED/HD 1080i, HD 1080p application
- Supports Component YPrPb or RGB video
- Single Video Load Driver (2VPP, 150Ω, Av=6dB)
- Selectable clamp or bias mode on Pb/B, Pr/ R inputs
- Compatible for AC- or DC-Coupled inputs and outputs
- DC-Coupled outputs, no need for coupling capacitors
- Output disable
- Single 5V supply
- DIO2583 offers package of TSSOP-14 with exposed pad option .
- 8kV HBM ESD protection

Applications

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

Ordering Information

Order Part Number	Top Marking		T _A		Package
DIO2583TP14	DIO2583	RoHS or Green	-40 to +85°C	TSSOP-14	Tape & Reel, 2500
DIO2583XT14	DIO2583	RoHS or Green	-40 to +85°C	EP-TSSOP-14	Tape & Reel, 2500

Descriptions

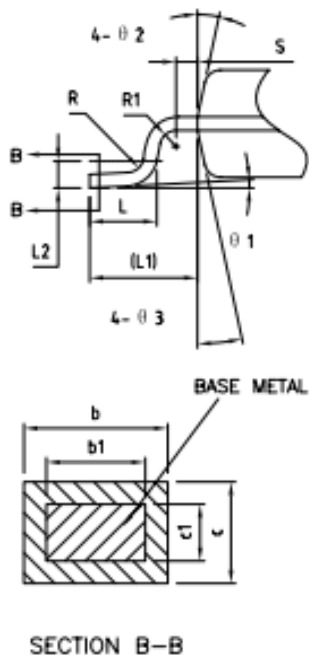
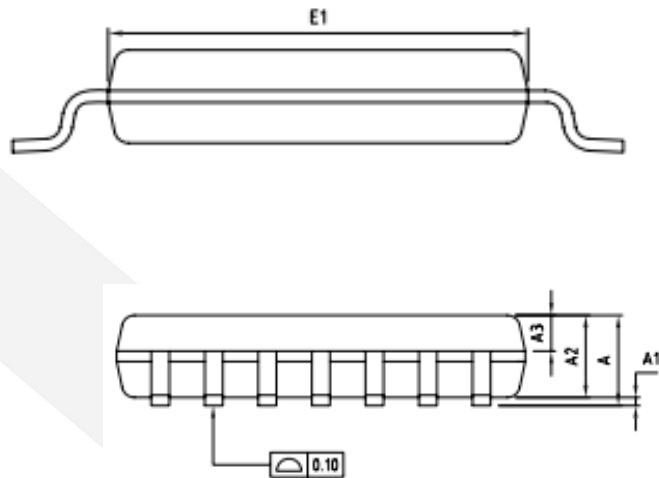
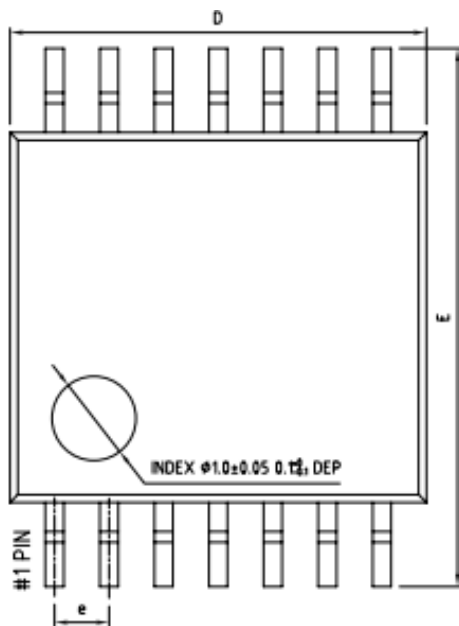
DIO2583 is a comprehensive filter for applications such as set-top box or DVD players. It could be a replacement for passive LC filters and drivers with a low-cost integrated device.

DIO2583 filter channels supports either component YPbPr or RGB video signals. Frequency response of the filter channels offers selectable 10, 17, 40, or 60MHz. DIO2583 also has output disable.

DIO2583 could be driven directly by DC-coupled DAC output or AC-coupled video load. The all inputs are compatible for standard 1V_{pp} video signals.

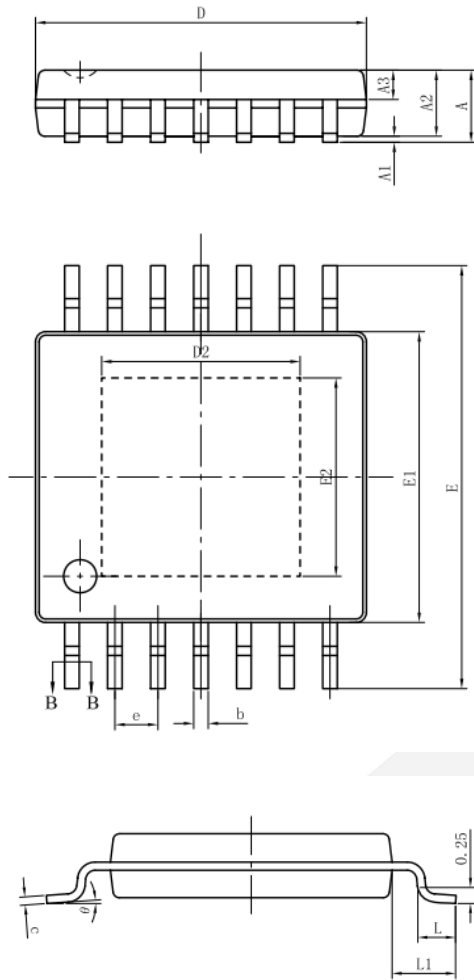
DIO2583 has an output amplifier in each channel, which can drive a single 150Ω AC- or DC-coupled video load. These amplifiers can be disabled to save power when DC-coupled.

Physical Dimensions: TSSOP-14

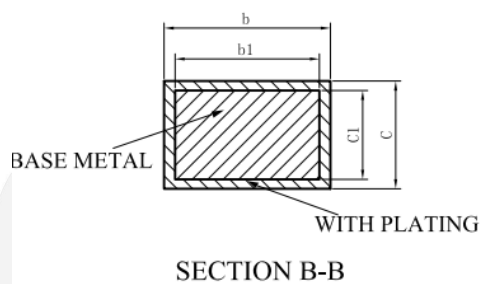


Symbol	Dimensions In Millimeters		
	Min	Nom	Max
A	-	-	1.20
A1	0.05	-	0.15
A2	0.90	1.00	1.05
A3	0.34	0.44	0.54
b	0.20	-	0.28
b1	0.20	0.22	0.24
c	0.10	-	0.19
c1	0.10	0.13	0.15
D	4.86	4.96	5.06
E	6.20	6.40	6.60
E1	4.30	4.40	4.50
e	0.65BSC		
L	0.45	0.60	0.75
L1	1.00REF		
L2	0.25BSC		
R	0.09	-	-
R1	0.09	-	-
S	0.20	-	-
$\theta 1$	0°	-	8°
$\theta 2$	10°	12°	14°
$\theta 3$	10°	12°	14°

Physical Dimensions: EP-TSSOP-14



Symbol	Millimeter	
	MIN	MAX
A	-	1.20
A1	0.05	0.15
A2	0.90	1.05
A3	0.39	0.49
b	0.20	0.30
b1	0.19	0.25
c	0.13	0.19
c1	0.12	0.14
D	4.86	5.06
D2	2.90	3.10
E2	2.90	3.00
E1	4.30	4.50
E	6.25	6.40
e	0.65BSC	
L	0.45	0.75
L1	1.00BSC	
θ	0	8°



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.



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DIOO:

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