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DIO2684

One Channel SD and

Three Channel 1080i High Definition Video Filter

Features

- One CVBS channel with 6th-order, 9MHz filter
- Three channels with per channel a 6th-order,
 37MHz filter
- Transparent Input Clamping
- Fixed 6dB Gain
- AC or DC Coupled Inputs
- AC or DC Coupled Outputs
- Operates from 3.135V to 5.25V Single Power Supply
- RoHS or Green EP-MSOP-10 Package
- 8kV ESD protection

Applications

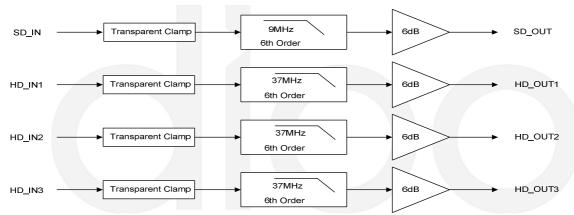
- DVD Players
- Video Amplifiers
- Cable set-top boxes
- Personal Video Recorders
- Communications Devices
- Video on Demand

Descriptions

DIO2684 is a low voltage, four channels video amplifier with integrated 6dB reconstruction filter and input clamps. In fact, DIO2684 integrates a single CVBS (SD) video driver plus a triple 1080i HD video driver. DIO2684 can improve image quality compared to the passive LC filters.

All channels can be directly driven by a DC-coupled or an AC-coupled signal. Internal diode-like clamps and bias circuitry may be used if AC-coupled inputs are required. The output in DIO2684 can also drive AC or DC coupled single (150 Ω) or dual (75 Ω) loads. The DC coupling capacitors can be removed.

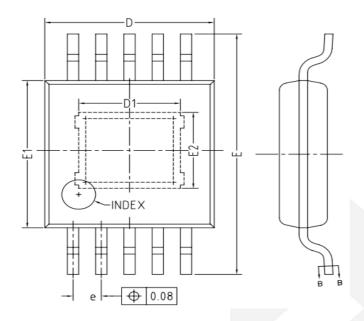
Block Diagram

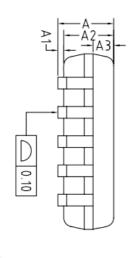


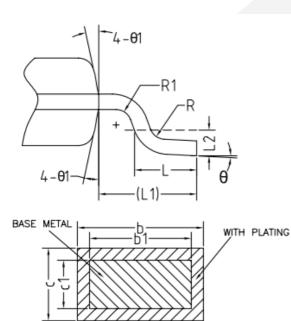
Ordering Information

Order Part Number	Top Marking		T _A	Package	
DIO2684XM10	DIO2684	Green	-40 to +85°C	EP-MSOP-10	Tape & Reel, 3000

Physical Dimensions: EP-MSOP-10







SECTION B-B

SYMBOL	MIN	NOM	MAX		
Α	-	-	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		
С	0.15	-	0.20		
c1	0.14	0.15	0.16		
D	1.90	3.00	3.10		
D1	0.75	-	2.50		
E	4.70	4.90	5.10		
E1	2.90	3.00	3.10		
E2	0.75	-	2.50		
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°		

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.