DIO2764

4-Channel SDTV Video Amplifier with 6th Order Filters and 6dB Gain

Features
- 4-SDTV Video Amplifiers for CVBS, S-Video: Y"P'B'P'R 480i/576i, Y"U'V', or G'B'R' (R'G'B')
- Integrated Low-Pass Filters: 6th Order 9 MHz (–3dB)
  -1dB Passband Bandwidth at 8.0MHz
  56dB Attenuation at 27MHz
- 200MHz (–3dB) Filter Bypass
- 6dB Gain
- DC-Coupled with 300mV Output Shift
- AC-Coupled with Sync-Tip Clamp
- AC-Coupled with Biasing Allowed
- Operates from 3.135V to 5.25V
- Rail-to-rail output
- RoHS or Green TSSOP-14 Package
- 8kV ESD protection

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

Descriptions
The DIO2764 is a 4-Channel SDTV Video Amplifier with 6th order filters and 6dB gain video filter. These four-channel integrated video buffer incorporates a 6th order Butterworth filter and able to be bypassed.

The input can be configured for either ac or dc-coupled inputs. The 300mV output level shift allows for a full sync dynamic range at the output with 0V input. The ac-coupled modes include a transparent sync-tip clamp option for CVBS, Y", and G'B'R' signals with sync. AC-coupled biasing for C'/P'B'/P'R channels can easily be achieved by adding an external resistor.

The rail-to-rail output stage of DIO2764 with 6dB gain allows for both ac and dc line driving. The DIO2764 is an excellent choice for portable or other power-sensitive applications.

Block Diagram
# Ordering Information

<table>
<thead>
<tr>
<th>Order Part Number</th>
<th>Top Marking</th>
<th>$T_A$</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIO2764CT14</td>
<td>DIO2764</td>
<td>-40 to +85°C</td>
<td>TSSOP-14, Tape &amp; Reel, 2500</td>
</tr>
</tbody>
</table>

4-Channel SDTV Video Amplifier with 6th Order Filters and 6dB Gain
### Physical Dimensions: TSSOP-14

#### Symbol | MIN | NOM | MAX
--- | --- | --- | ---
A | - | - | 1.2
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 | 0.19
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 | - | -
Θ1 | 0° | - | 8°
Θ2 | 10° | 12° | 14°
Θ3 | 10° | 12° | 14°
## 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](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.
Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

DIOO:
DIO2764CT14