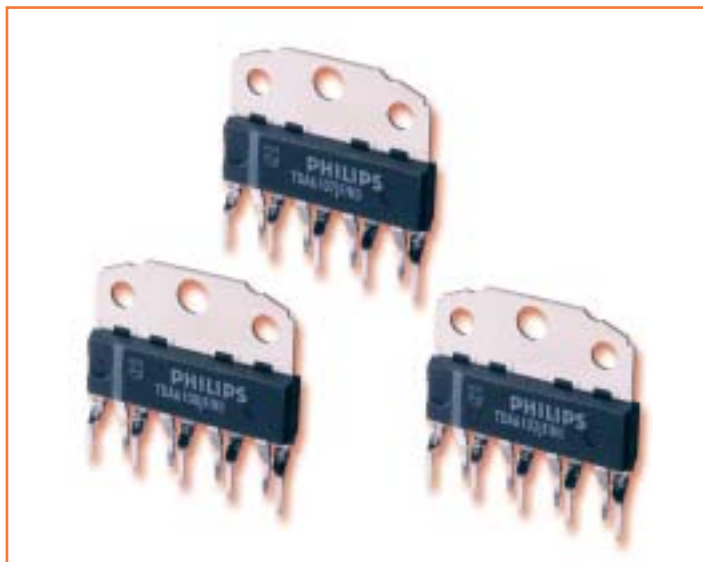


TDA6102/07/08

Triple video output amplifiers

By integrating three video amplifiers in a single IC, the TDA610x family of ICs provides a single IC solution for driving color TV CRTs.



Key applications

- Color TV CRT

Key features

- The TDA6102/7/8 family is pin compatible
- Few external components required and simple application
- 200 V single supply voltage
- 2.5 V internal reference voltage
- Fixed gain of 51
- Black-Current Stabilization (BCS) circuit
- Thermal protection
- No external heat sink required (only in case of TDA6102)
- DBS9MPF package

Semiconductors

Each device in the TDA610x family contains three video output amplifiers in one plastic DIL-bent-SIL 9-pin medium power (DBS9MPF) package (SOT111-1). Using high-voltage DMOS technology, this enables each of these ICs to drive the three cathodes of a color CRT directly, providing a significant reduction in the Bill of Materials for new designs.

For maximum performance, the TDA610x amplifiers should be used with black-current control, enabling automatic black current stabilization and removing the need for any external alignments on the CRT board.

Comparison table

Feature	TDA6102JF	TDA6107JF	TDA6108JF
Channels per IC	3	3	3
Fixed gain	51	51	51
Voltage supply	200 V only	200 V only	200 V only
Small signal bandwidth 60 Vp-p		5.5 MHz	9 MHz
Large signal bandwidth 100 Vp-p	3.5 MHz*	4.5 MHz	8 MHz
Static power dissipation	0.5 W	1.4 W	2.1 W
Internal thermal protection	Y	Y	Y
Package	DBS9MPF	DBS9MPF	DBS9MPF

* The signal bandwidth for the TDA6102JF is only defined at 70 Vp-p

RGB amplifier family & application area

RGB amplifier	Screen size
TDA6102	14" to 21" (low end)
TDA6107	20" to 27" (mid end)
TDA6108	25" to 34" (high end)

PHILIPS

TDA6102/07/08

Triple video output amplifiers

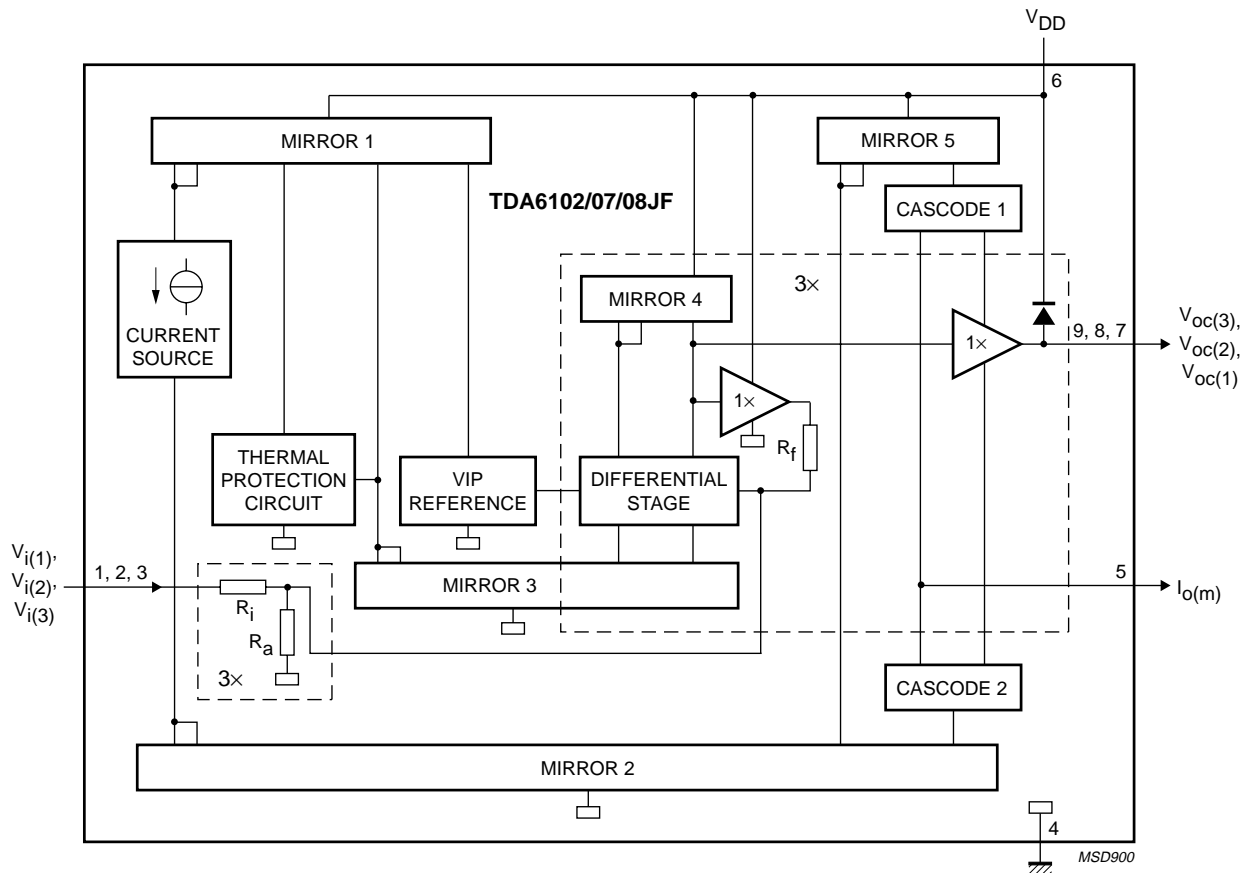


Diagram applicable for TDA6107 and TDA6108

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SCS 76

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date of release: October 2002
document order number: 9397 750 10481

Published in the Netherlands