

Triple video output amplifier

TDA6107Q

FEATURES

- Typical bandwidth of 5.5 MHz for an output signal of 60 V (peak-to-peak value)
- High slew rate of 900 V/μs
- No external components required
- Very simple application
- Single supply voltage of 200 V
- Internal reference voltage of 2.5 V
- Fixed gain of 50

- Black-Current Stabilization (BCS) circuit
- Thermal protection.

GENERAL DESCRIPTION

The TDA6107Q includes three video output amplifiers in one plastic DIL-bent-SIL 9-pin medium power (DBS9MPF) package (SOT111-1), using high-voltage DMOS technology, and is intended to drive the three cathodes of a colour CRT directly. To obtain maximum performance, the amplifier should be used with black-current control.

ORDERING INFORMATION

TYPE NUMBER	PACKAGE		
	NAME	DESCRIPTION	VERSION
TDA6107Q	DBS9MPF	plastic DIL-bent-SIL medium power package with fin; 9 leads	SOT111-1

BLOCK DIAGRAM

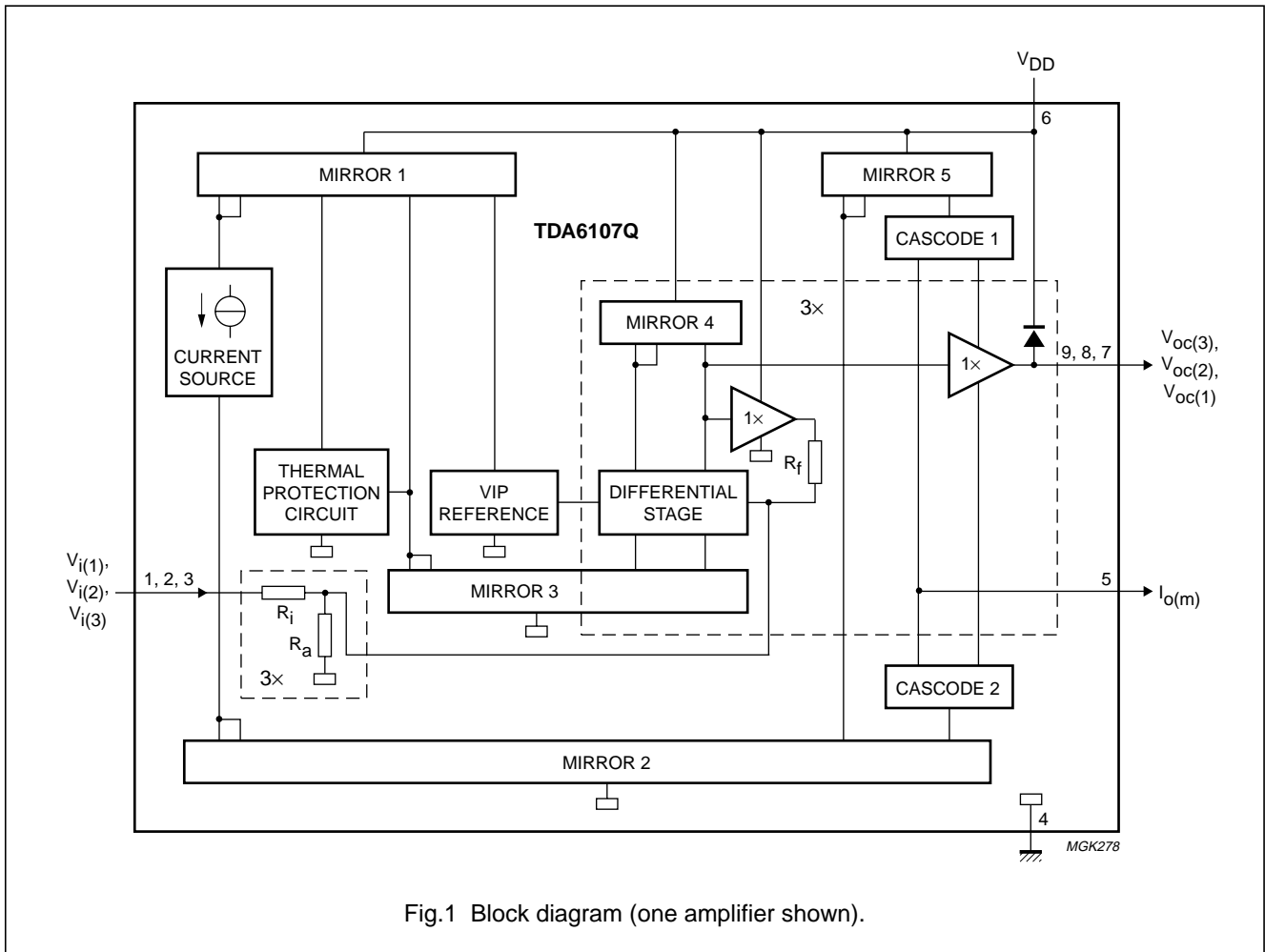


Fig.1 Block diagram (one amplifier shown).

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PINNING

SYMBOL	PIN	DESCRIPTION
$V_{i(1)}$	1	inverting input 1
$V_{i(2)}$	2	inverting input 2
$V_{i(3)}$	3	inverting input 3
GND	4	ground (fin)
I_{om}	5	black current measurement output
V_{DD}	6	supply voltage
$V_{oc(3)}$	7	cathode output 3
$V_{oc(2)}$	8	cathode output 2
$V_{oc(1)}$	9	cathode output 1

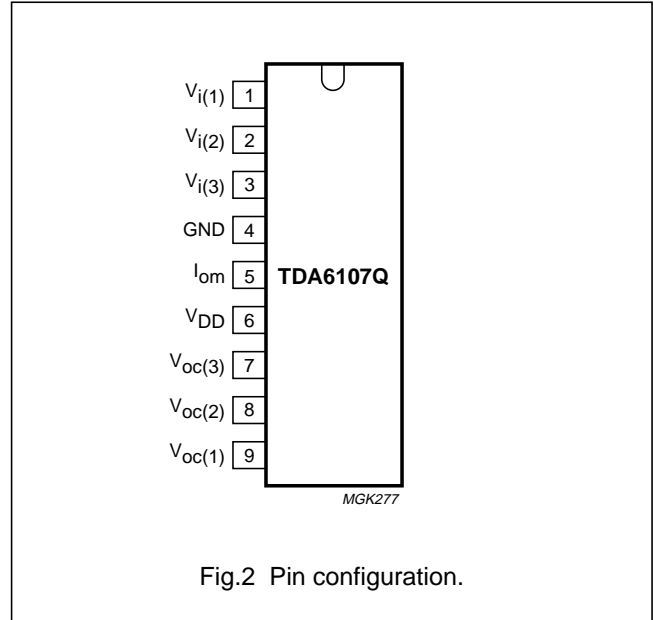


Fig.2 Pin configuration.

LIMITING VALUES

In accordance with the Absolute Maximum Rating System (IEC 134); voltages measured with respect to pin 4 (ground); currents as specified in Fig.1; unless otherwise specified.

SYMBOL	PARAMETER	MIN.	MAX.	UNIT
V_{DD}	supply voltage	0	250	V
V_i	input voltage at pins 1 to 3	0	12	V
$V_{o(m)}$	measurement output voltage	0	6	V
$V_{o(c)}$	cathode output voltage	0	V_{DD}	V
T_{stg}	storage temperature	-55	+150	°C
T_j	junction temperature	-20	+150	°C
V_{es}	electrostatic handling			
	Human Body Model (HBM)	-	2000	V
	Machine Model (MM)	-	300	V

HANDLING

Inputs and outputs are protected against electrostatic discharge in normal handling. However, to be totally safe, it is desirable to take normal precautions appropriate to handling MOS devices (see "Handling MOS Devices").

QUALITY SPECIFICATION

Quality specification "SNW-FQ-611 part D" is applicable and can be found in the "Quality reference Handbook". The handbook can be ordered using the code 9397 750 00192.