

AN6041

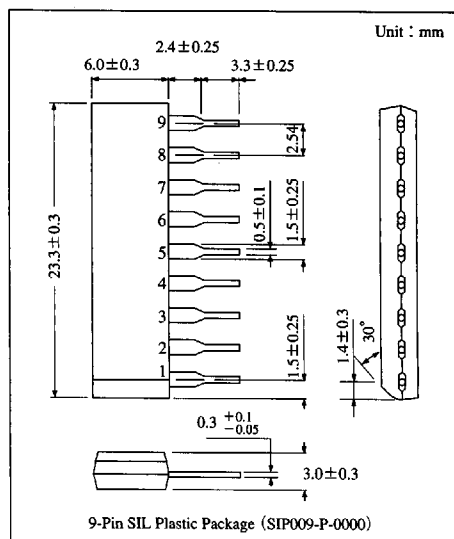
Dual Balanced Modulator IC for Video Camera

Overview

The AN6041 is an integrated circuit which incorporates two balanced modulators.

Features

- Dual balanced modulator
- External bias circuit is not required
- Carrier suppression : 40dB typ.

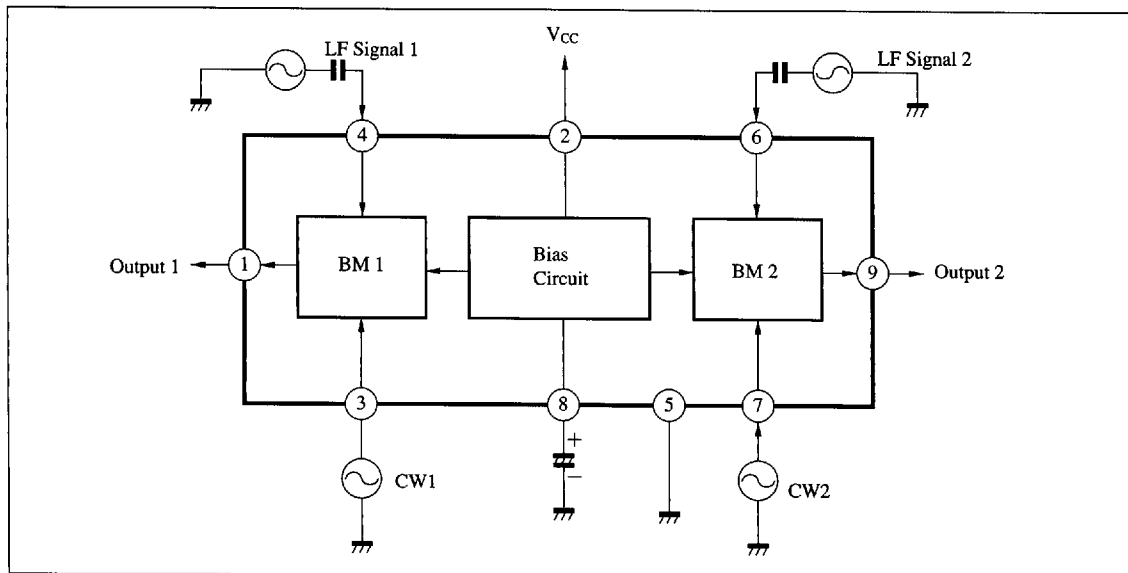


Pin Descriptions

Pin No.	Pin name
1	Output (1)
2	V _{CC}
3	Carrier input (1)
4	Signal input (1)
5	GND
6	Signal input (2)
7	Carrier input (2)
8	Ref. voltage
9	Output (2)

ICs for
Video
Camera

Block Diagram



■ Absolute Maximum Ratings (Ta=25°C)

Parameter		Symbol	Rating	Unit
Supply voltage		V _{CC}	9.5	V
Supply current		I _{CC}	25	mA
Power dissipation		P _D	240	mW
Temperature	Operating ambient temperature	T _{opr}	−20 to +75	°C
	Storage temperature	T _{sig}	−55 to +125	°C

■ Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	min	typ	max	Unit
Circuit voltage	V ₁₋₅	V _{CC} =9V	5.7	6.3	6.9	V
	V ₃₋₅		1.9	2.4	2.9	V
	V ₄₋₅		5.5	6.1	6.7	V
	V ₆₋₅		5.5	6.1	6.7	V
	V ₇₋₅		1.9	2.4	2.9	V
	V ₈₋₅		5.5	6.1	6.7	V
	V ₉₋₅		5.5	6.0	6.7	V
Total circuit current	I _{tot}		13	17	22	mA
Carrier leak	CL ₍₁₎		—	—	2.5	mV _{rms}
	CL ₍₂₎		—	—	2.5	mV _{rms}
Output voltage	V _{O(1)}		550	650	760	mV _{rms}
	V _{O(2)}		550	650	760	mV _{rms}

