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NTE1709 Integrated Circuit Dual Balanced Modulator for Video Cameras

Description:

The NTE1709 is an integrated circuit in a 9-Lead SIP type package that incorporates two balanced modulators

Features:

- Dual Balanced Modulator
- No External Bias Circuit Required
- Carrier Suppression: 40dB Typ

Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Supply Voltage, V_{CC} 9.5V
 Supply Current, I_{CC} 25mA
 Power Dissipation, P_D 240mW
 Operating Ambient Temperature Range, T_{opr} -20° to $+75^\circ\text{C}$
 Storage Temperature Range, T_{stg} -40° to $+150^\circ\text{C}$

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = 9\text{V}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Circuit Voltage	V_{1-5}		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 Leakage	CL		–	–	2.5	mV _{rms}
Output Voltage	V_O		550	650	760	mV _{rms}

Pin Connection Diagram
(Front View)

