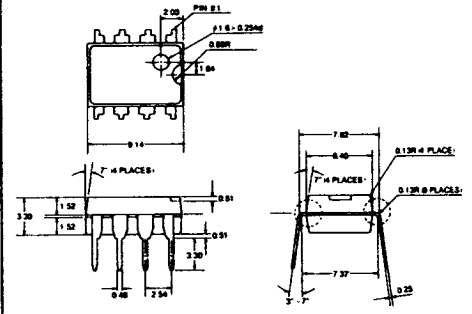
DBL 5009B

ON-HOOK AMPLIFIER

8DIP Unit: mm



The DBL 5009 is a monolithic integrated circuit designed for speaker amp.

☐ FEATURES

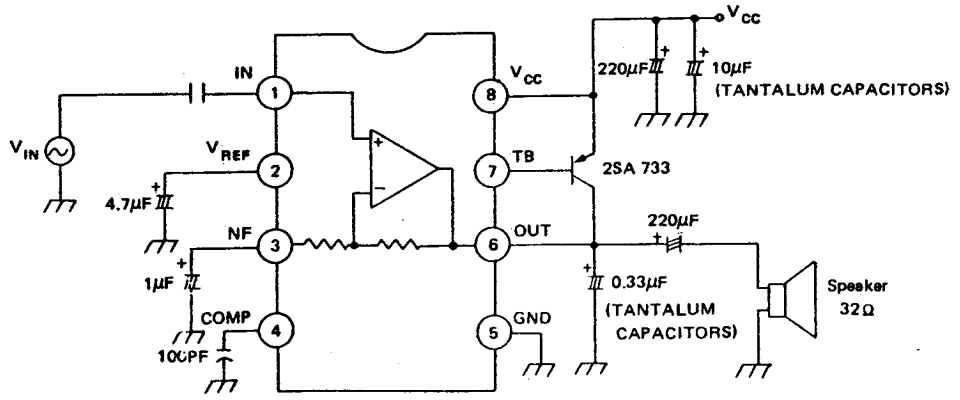
- ○ Operating supply voltage range : V_{CC} = 1.5~5.0
- ○ Recommended operating supply voltage : V_{CC} = 3V
- ○ Low quiescent current : I_{CCQ} : 2.6mA
- ○ Package is compact.

☐ APPLICATION

- ○ Telephone set

☐ MAXIMUM RATINGS

Characteristics	Symbol	Rating	Unit
Supply Voltage	V_{CC}	10	V
Power Dissipation	P_D	800	mW
Operating Temperature	T_{opr}	—12~+60	℃
Storage Temperature	T_{stg}	—55~+150	℃



☐ ELECTRICAL DC CHARACTERISTICS

(Pin voltage at V_{CC} = 3V and no input signal)

Pin No.	Symbol	Typical Value	Unit	Pin No.	Symbol	Typical Value	Unit
1	V_1	1.4	V	5	V_5	0	V
2	V_2	1.4	V	6	V_6	1.5	V
3	V_3	1.4	V	7	V_7	2.3	V
4	V_4	1.3	V	8	V_8	3.0	V

☐ ELECTRICAL AC CHARACTERISTICS

(Unless otherwise specified, V_{CC} = 3V, f = 1KHz, V_{IN} = 20mVrms, R_L 32Ω, T_a = 25℃)

Characteristic	Symbol	Test condition	Min.	Typ.	Max.	Unit
Quiescent Current	I_{CCQ1}	V_{CC} = 2.0V		2.0		mA
	I_{CCQ2}	V_{CC} = 3.0V		2.6		mA
	I_{CCQ3}	V_{CC} = 5.0V		3.5		mA
Close Loop Voltage Gain	G_V			27		dB
Maximum Output Voltage	V_{OM}	THD = 10%		1.0		V_{rms}
Total Harmonic Distortion	THD	V_{IN} = 40m Vrms		0.6		%
Output noise Voltage	V_{NO}	V_{IN} = 0		200		μVrms
Input Resistance	R_{IN}			15		KΩ

☐ TYPICAL PERFORMANCE CHARACTERISTICS

