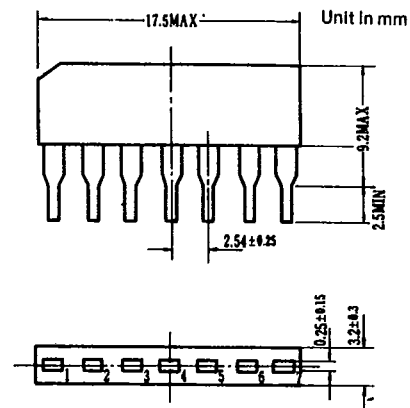


ECG1087

GENERAL-PURPOSE PRE-AMPLIFIER MODULE

- o General-Purpose Pre-Amplifier
- o Voltage Amplifier Application

- Low Noise
- Operates from a Wide Range of Power Supplies
- High Voltage Gain

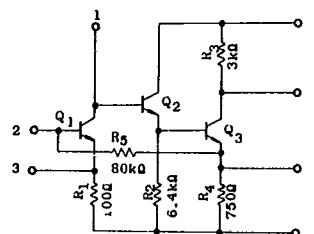


MAXIMUM RATINGS ($T_a = 25^{\circ}\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V_{CC}	15	V
Power Dissipation (Note)	P_D	200	mW
Operating Temperature	T_{opr}	$-30 \sim 75$	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	$-55 \sim 125$	$^{\circ}\text{C}$

(Note)
 Derated above
 $T_a = 25^{\circ}\text{C}$ in the
 proportion of 2mW/ $^{\circ}\text{C}$

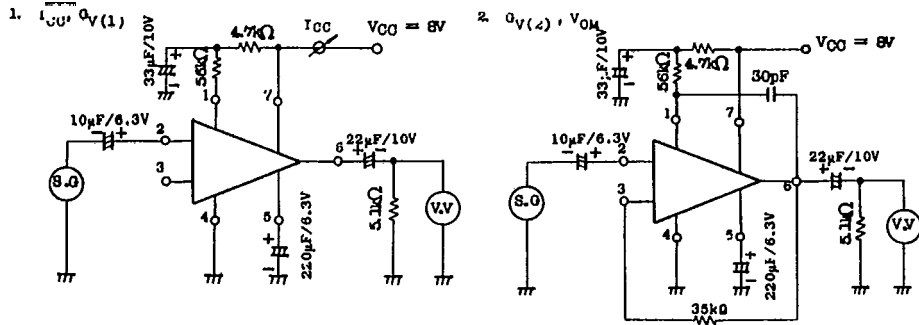
EQUIVALENT CIRCUIT



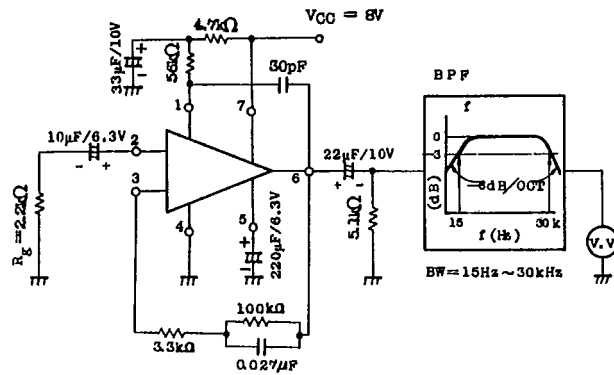
ELECTRICAL CHARACTERISTICS ($V_{CC}=8\text{V}$, $R_L=5.1\text{k}\Omega$, $T_a=25^{\circ}\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Current	I_{CC}	1	$V_{IN}=0$	-	1.5	2.1	mA
Voltage Gain (1) (Open Loop)	$G_V(1)$	1	$f=1\text{kHz}$	75	78	82	dB
Voltage Gain (2) (Closed Loop)	$G_V(2)$	2	$f=1\text{kHz}$, $R_{NF}=35\text{k}\Omega$	46.5	-	52.5	dB
Max. Output Voltage	V_{OM}	2	$f=1\text{kHz}$, $K_F=1\%$ (below)	1.0	-	-	V_{rms}
Equivalent Input Noise Voltage	V_{NI}	3	$R_F=2.2\text{k}\Omega$ NAB 1kHz Gain Converted with G_V (1kHz)	-	2.0	-	μV_{rms}

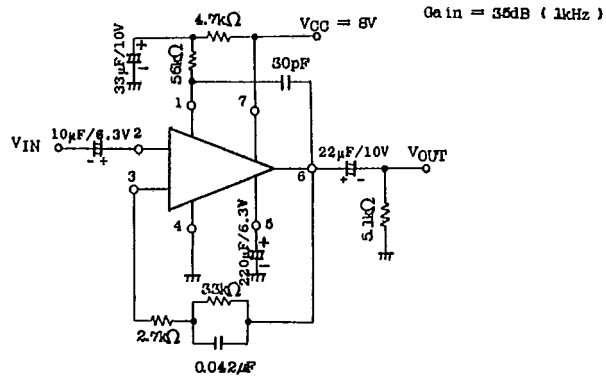
TEST CIRCUIT

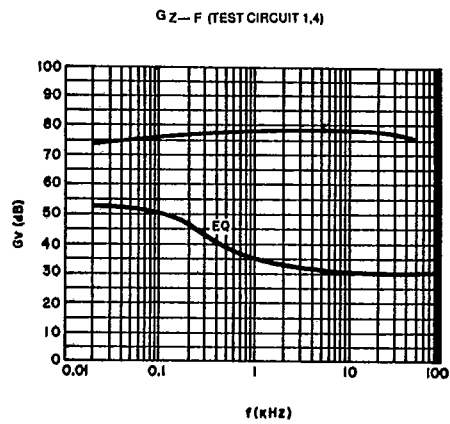
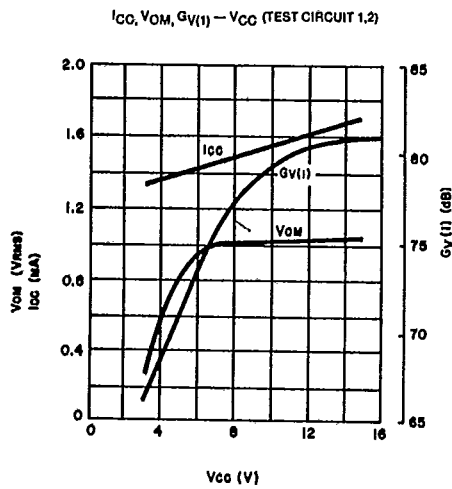
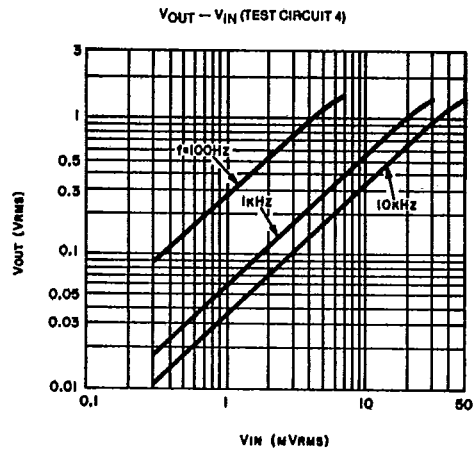
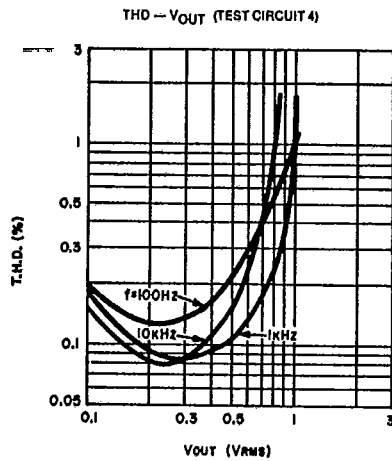


3. V_{N1}



4. EQUALIZER AMPLIFIER FOR CASSETTE TAPE RECORDER





APPLICATION CIRCUIT

NAB 9,8cm/sec EQUALIZER AMPLIFIER FOR CAR-STEREO

Gain = 35dB (1kHz)

