

9097247 TOSHIBA. ELECTRONIC

02E 16880 D

TA7120P

T-74-09-01

**GENERAL PURPOSE PRE-AMPLIFIER,
VOLTAGE AMPLIFIER.**

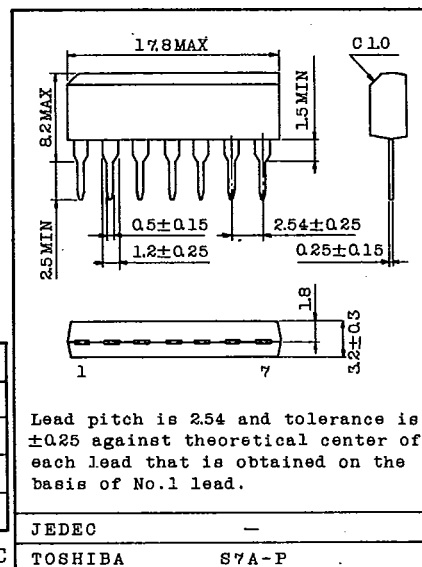
- . Low Noise. : $V_{NI}=2\mu V_{rms}$ (Typ.)
- . Wide Operating Supply Voltage Range.
- . High Open Loop Voltage Gain : $G_{VO}=78dB$ (Typ.)

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

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

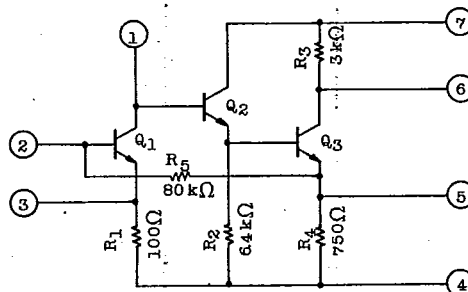
Note: Derated above $T_a=25^\circ C$ in the proportion of $2mW/^\circ C$

Unit in mm

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

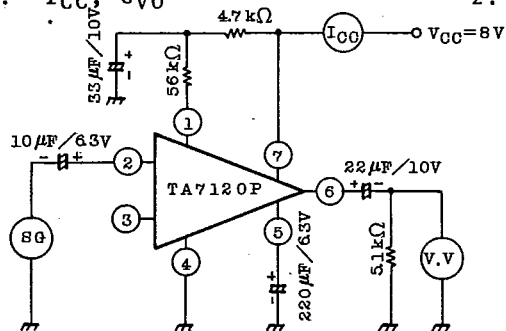
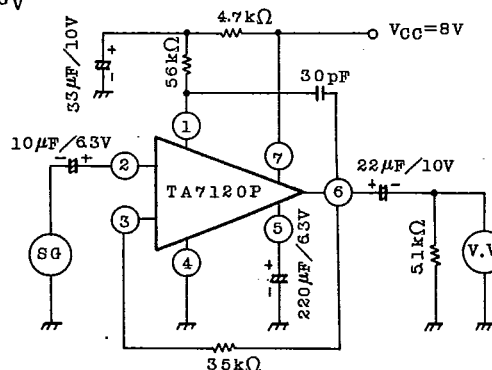
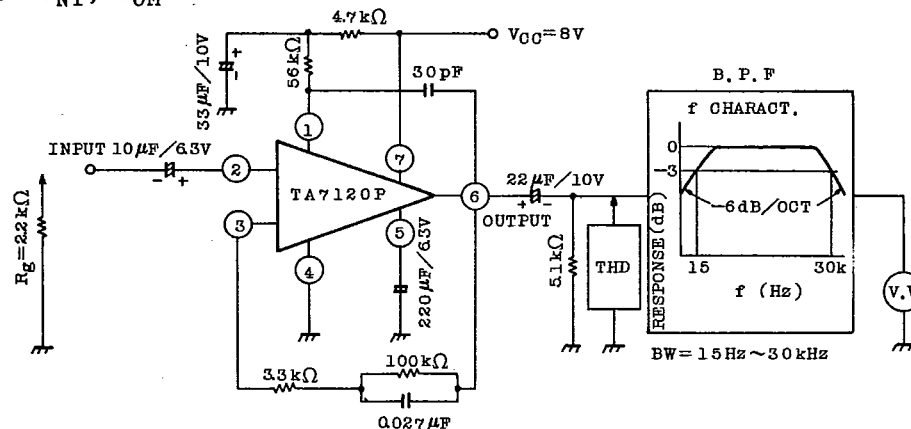
CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Current	I_{CC}	1	$V_{IN}=0$	—	1.5	2.1	mA
Voltage Gain (Open Loop)	G_{VO}	1	$f=1kHz$, $V_{IN}=-80dBm$	75	78	82	dB
Voltage Gain (Closed Loop) (Note)	G_V	2	$f=1kHz$, $R_{NF}=35k\Omega$, $V_{OUT}=1V_{rms}$	46.5	—	52.5	dB
Maximum Output Voltage	V_{OM}	3	$f=1kHz$, $THD=1\%$	1.0	—	—	V_{rms}
Equivalent Input Noise Voltage	V_{NI}	3	NAB Equalizer $R_g=2.2k\Omega$, $f=1kHz$	—	2.0	—	μV_{rms}

Note: In regard to the value of Voltage Gain (closed loop voltage), it is possible to be classified.

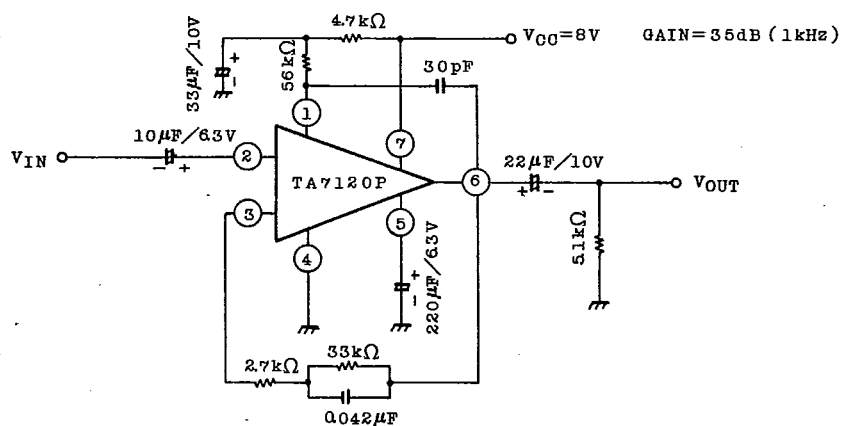
EQUIVALENT CIRCUIT**AUDIO LINEAR IC**

TA7120P

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TEST CIRCUIT1. I_{CC} , G_{VO} 2. G_v 3. V_{NI} , V_{OM} 

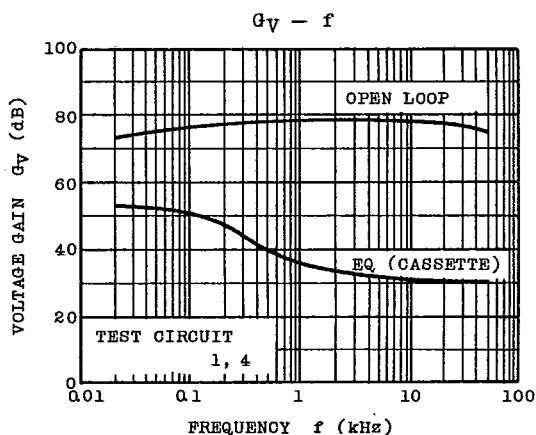
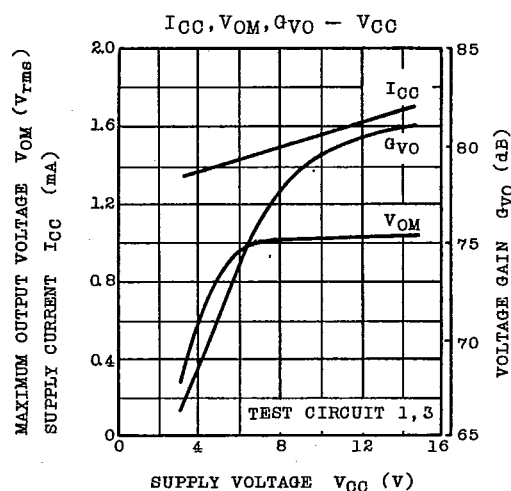
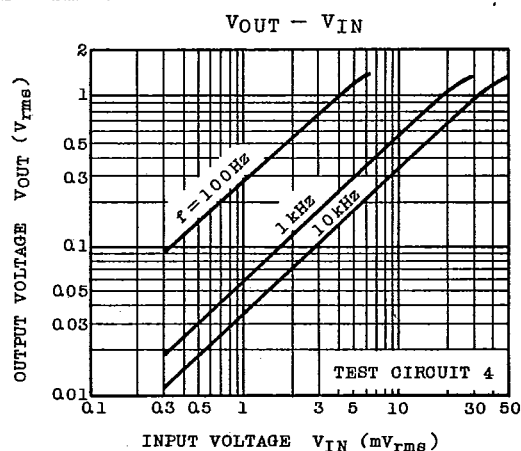
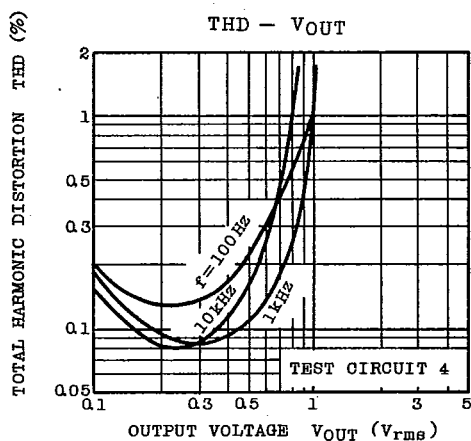
4. EQUALIZER AMPLIFIER FOR CASSETTE TAPE RECORDER

**TOSHIBA**

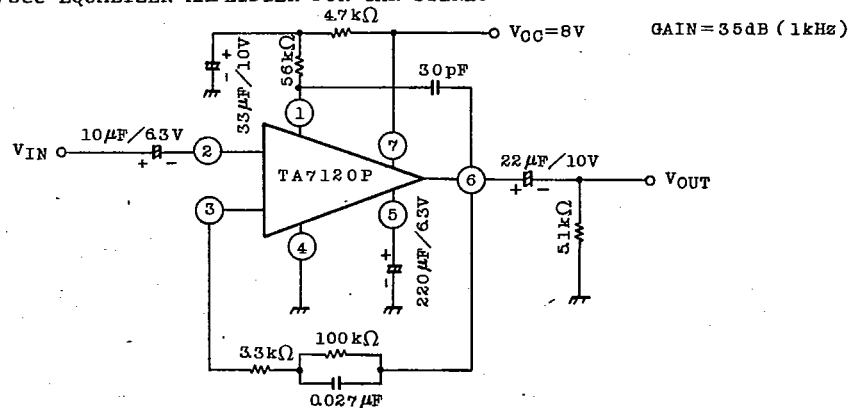
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02E 16882 D

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TA7120P**APPLICATION CIRCUIT**

NAB 9.8cm/sec EQUALIZER AMPLIFIER FOR CAR-STEREO

**AUDIO LINEAR IC**