

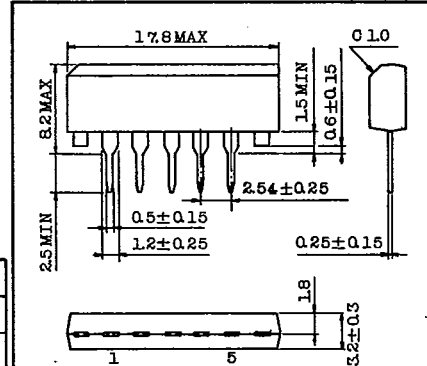
TA7060AP

T-74-09-01

FOR FM IF AMPLIFIER
FOR TV SIF AMPLIFIER

- . Recommended for Wide and Narrow Bands Amplifier.
- . Excellent FM/IF Limiter Circuit.

Unit in mm



Lead pitch is 2.54 and tolerance is ± 0.25 against theoretical center of each lead that is obtained on the basis of No.1 lead.

JEDEC -
TOSHIBA 85A-P

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	VCC	15	V
Output Voltage	VOUT	24	V
Input Voltage (Between 1 pin and 2 pin)	VIN	± 15	V
Power Dissipation (Note)	PD	400	mW
Operating Temperature ($V_{CC}=12V$)	Topr	-30 ~ 75	$^\circ\text{C}$
Storage Temperature	Tstg	-55 ~ 125	$^\circ\text{C}$

Note: Derated above $T_a=25^\circ\text{C}$ in the proportion of $4\text{ mW}/^\circ\text{C}$.

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

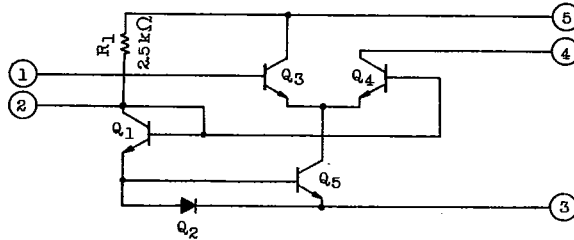
CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Supply Current	ICC	1	$V_{CC}=12V$	5.3	9.5	14	mA	
			$V_{CC}=9V$	-	6.5	-		
Power Dissipation	PD	1	$V_{CC}=12V$	-	114	-	mW	
			$V_{CC}=9V$	-	59	-		
Power Gain	Gp	2	$V_{CC}=12V, f=10.7\text{MHz}$	27	30	33	dB	
			$V_{CC}=9V, f=10.7\text{MHz}$	-	27	-		
Voltage Gain	Gv	3	$V_{CC}=12V, R_g=50\Omega, R_L=1k\Omega$	-	26.5	-	dB	
Input Impedance	Parallel Input Resistance	-	$V_{CC}=12V, f=10.7\text{MHz}$	-	3.5	-	k Ω	
	Parallel Input Capacitance			cip	-	8.0	-	pF
Output Impedance	Parallel Output Resistance	r _{op}		-	80	-	k Ω	
	Parallel Output Capacitance	c _{op}		-	3.0	-	pF	
Forward Transfer Admittance	y _f	-		-	-	30	-	m Ω
Reverse Transfer Admittance	y _r	-		-	-	2.0	-	$\mu\Omega$

AUDIO LINEAR IC

TA7060AP

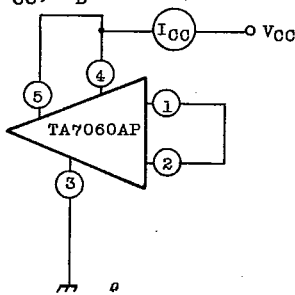
T-74-09-01

EQUIVALENT CIRCUIT

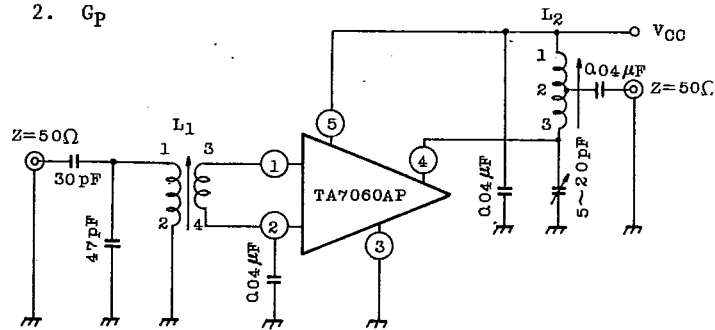


TEST CIRCUIT

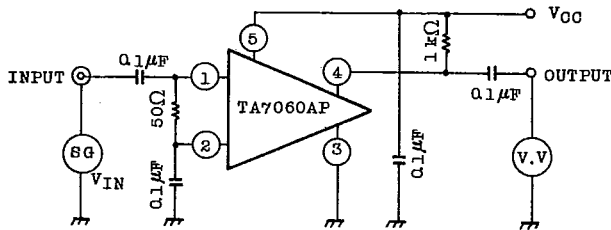
1. I_{CC}, P_D



2. G_p



3. G_v



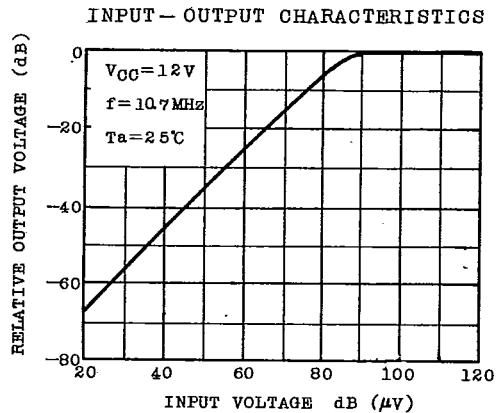
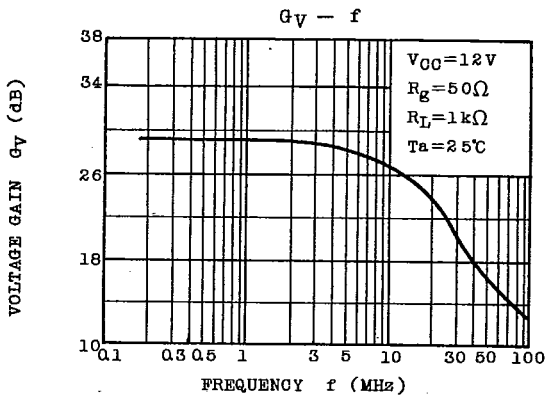
L_1 : Between terminals 1 and 2
16 Turns.

Between terminals 3 and 4
2 Turns.

L_2 : Between terminals 1 and 2
15 Turns.

Between terminals 1 and 3
25 Turns.

0.10mm ϕ UEW

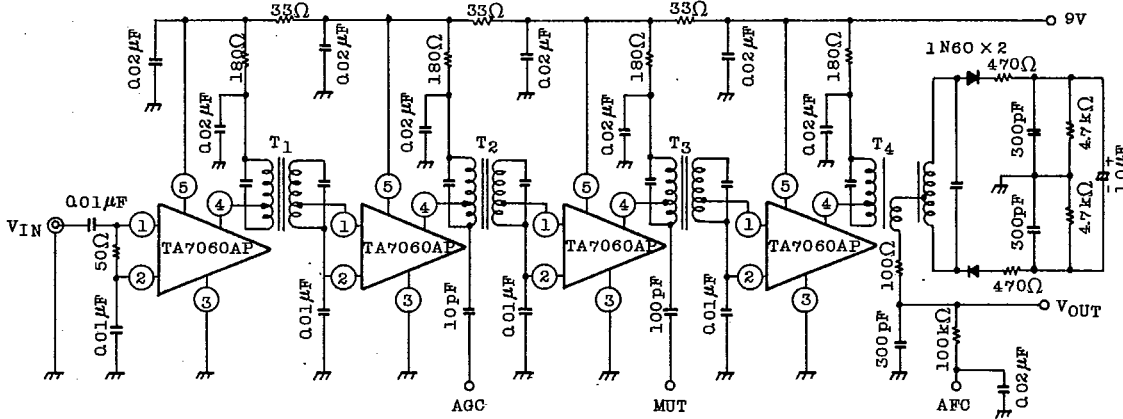


TOSHIBA

T-74-09-01

TA7060AP

APPLICATION CIRCUIT

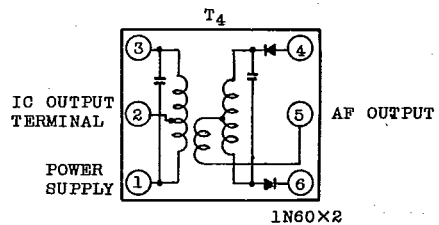
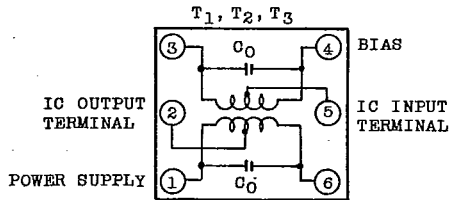


CHARACTERISTIC	SYMBOL	TEST CONDITION	UNIT
Supply Voltage	V _{CC}	-	9 V
Supply Current	I _{CC}	V _{CC} =9V	24 mA
Detected Output Voltage	V _{OD}	V _{IN} =60dB(μV), f=400Hz, ΔF=22.5kHz	70 mV
Input Limiting Voltage	V _{IN(lim)}	-3dB Output	21 dB(μV)
Band Width	BW	6dB Band Width	±110 kHz
Total Harmonic Distortion	THD	V _{IN} =60dB(μV), f=400Hz, ΔF=75kHz	0.5 %
AM Rejection	AMR	FM f=400Hz, ΔF=75kHz, AM f=1kHz 30%	45 dB
Capture Ratio	-	f=400Hz, ΔF=75kHz	3 dB

COIL DATA

	C ₀ (pF)	f (MHz)	TURNS					
			Q ₀ 1-6	Q ₀ 3-4	1-6	1-2	3-4	4-5
T ₁	120	10.7	65	65	13	6	13	6
T ₂	120	10.7	65	65	13	6	13	6
T ₃	120	10.7	65	65	13	9	13	6

	C (pF)		f (MHz)	Q ₀ 1-3	TURNS				
	1-3	4-6			1-3	1-2	5-CT	4-CT	6-CT
T ₄	22	47	10.7	65	31 1/2	11	9 1/2	11	11



AUDIO LINEAR IC