TA7060AP

T-74-09-01

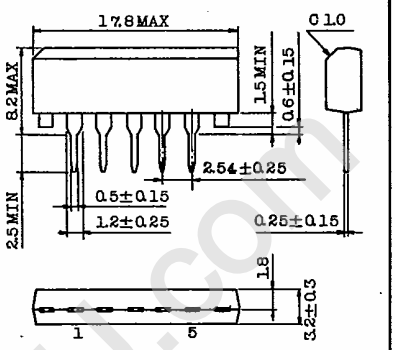
FOR FM IF AMPLIFIER

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	8SA-P

MAXIMUM RATINGS (Ta=25°C)

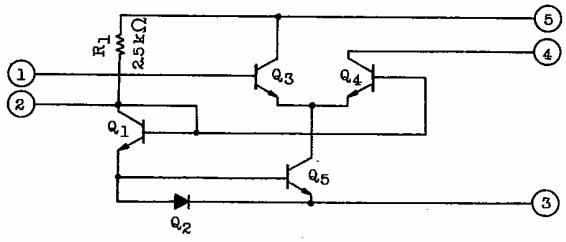
CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V_{CC}	15	V
Output Voltage	V_{OUT}	24	V
Input Voltage (Between 1 pin and 2 pin)	V_{IN}	±15	V
Power Dissipation (Note)	P_D	400	mW
Operating Temperature (V_{CC}=12V)	T_{opr}	-30～75	°C
Storage Temperature	T_{stg}	-55～125	°C

Note: Derated above Ta=25°C in the proportion of 4 mW/°C.

ELECTRICAL CHARACTERISTICS (Ta=25°C)

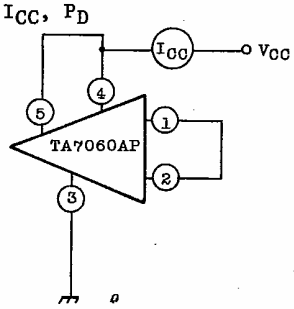
CHARACTERISTIC		SYMBOL	TEST CIRCUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Current		I_{CC}	1	V_{CC}=12V	5.3	9.5	14	mA
				V_{CC}=9V	-	6.5	-	
Power Dissipation		P_D	1	V_{CC}=12V	-	114	-	mW
				V_{CC}=9V	-	59	-	
Power Gain		G_P	2	V_{CC}=12V, f=10.7MHz	27	30	33	dB
				V_{CC}=9V, f=10.7MHz	-	27	-	
Voltage Gain		G_V	3	V_{CC}=12V, R_g=50Ω, R_L=1kΩ	-	26.5	-	dB
Input Impedance	Parallel Input Resistance	r_{ip}	-	V_{CC}=12V f=10.7MHz	-	3.5	-	kΩ
	Parallel Input Capacitance	c_{ip}			-	8.0	-	pF
Output Impedance	Parallel Output Resistance	r_{op}			-	80	-	kΩ
	Parallel Output Capacitance	c_{op}			-	3.0	-	pF
Forward Transfer Admittance		y_f	-	-	-	30	-	m℧
Reverse Transfer Admittance		y_r	-	-	-	2.0	-	μ℧

EQUIVALENT CIRCUIT

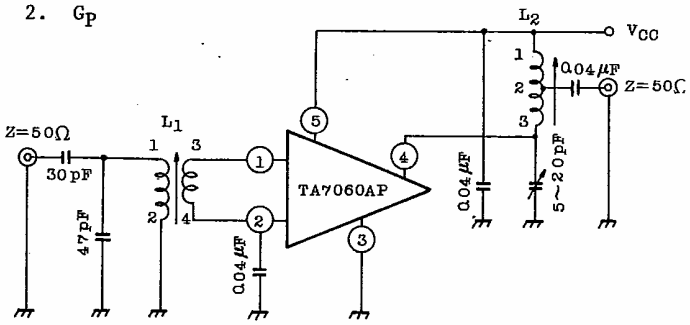


TEST CIRCUIT

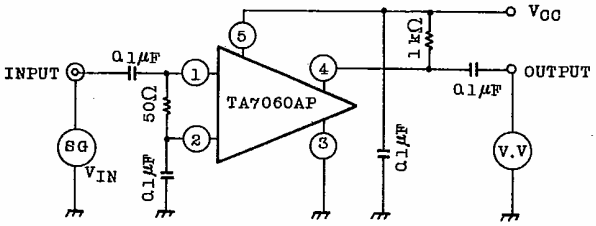
1. I_{CC}, P_D



2. G_P



3. G_V

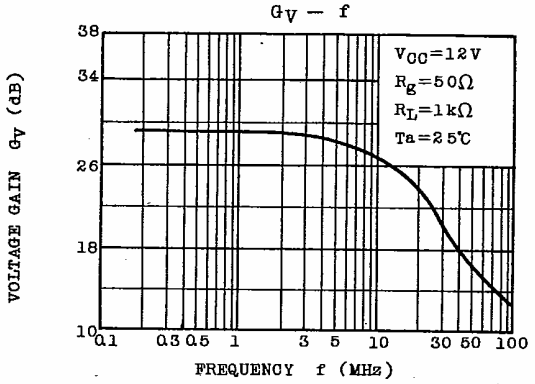


L_1 : Between terminals 1 and 2
16 Turns.
Between terminals 3 and 4
2 Turns.

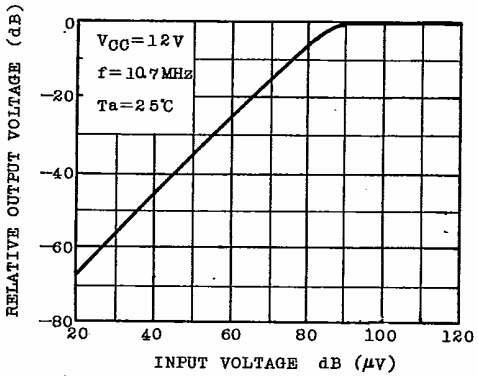
L_2 : Between terminals 1 and 2
15 Turns.
Between terminals 1 and 3
25 Turns.

0.10mmØ UEW

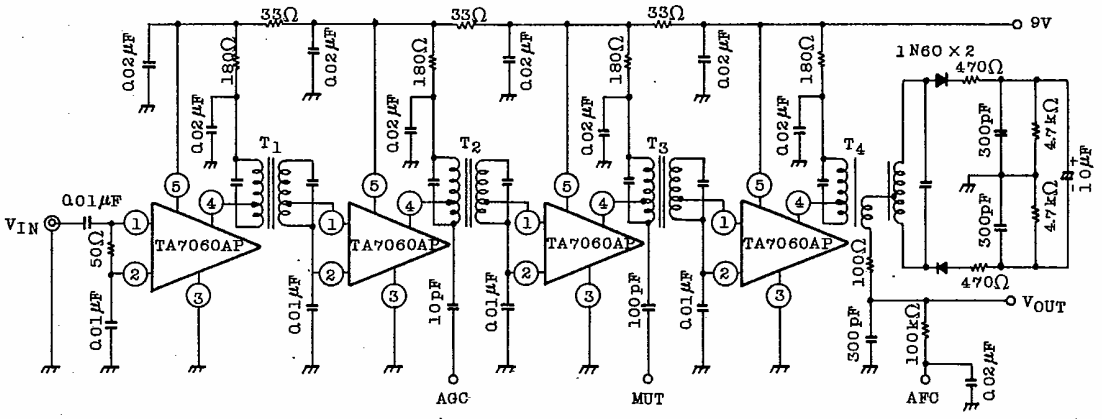
G_V — f



INPUT — OUTPUT CHARACTERISTICS



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, Δ F=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, Δ F=75kHz	0.5	%
AM Rejection	AMR	FM f=400Hz, Δ F=75kHz, AM f=1kHz 30%	45	dB
Capture Ratio	-	f=400Hz, Δ F=75kHz	3	dB

COIL DATA

	C_0 (pF)	f (MHz)	Q_0 1-6	Q_0 3-4	TURNS 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) 1-3	C (pF) 4-6	f (MHz)	Q_0 1-3	TURNS 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