

TA7302P

FOR FM IF AMPLIFIER WIDE-BAND AMPLIFIER

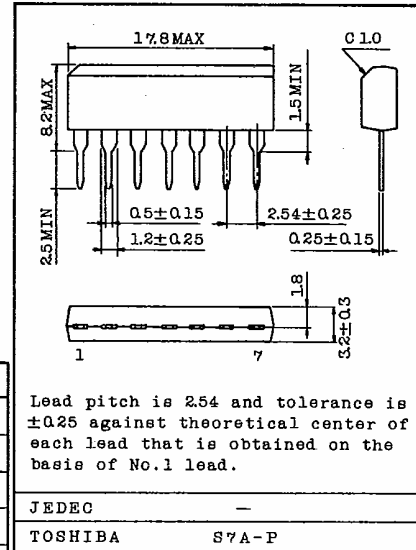
- High Sensitivity : $V_{IN(1m)}=78dB\mu V$ (Typ.)
- Wide Frequency Capability
- Regulated Voltage Output
- Wide Operating Supply Voltage Range : $V_{CC}=8 \sim 16V$

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V_{CC}	16	V
5 pin Output Current	I_5	13	mA
Power Dissipation (Note)	P_D	500	mW
Operating Temperature	T_{opr}	$-25 \sim 75$	$^{\circ}C$
Storage Temperature	T_{stg}	$-55 \sim 150$	$^{\circ}C$

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

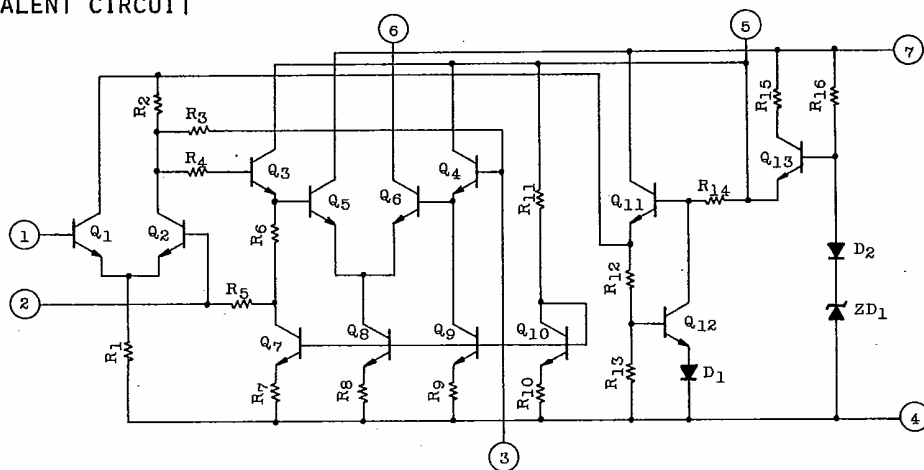
Unit in mm



ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}C$, $V_{CC}=12V$)

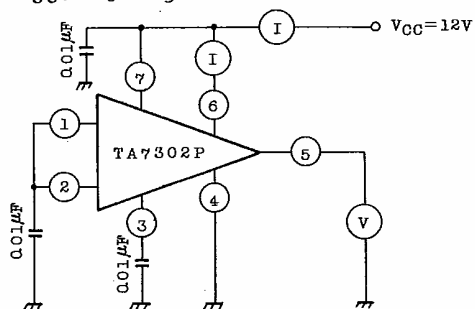
CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Current	I_{CC}	1	—	6.4	9.4	12.4	mA
6 pin Current	I_6	1	—	1.3	2.0	2.6	mA
5 pin Voltage	V_5	1	—	5.7	—	6.9	V
Voltage Gain	G_v	2	$f=10.7MHz$, $V_{in}=60dB\mu V$	31	34	37	dB
Input Limiting Voltage	$V_{IN(1m)}$	2	$f=10.7MHz$, $V_O=-3dB$	—	78	—	dB μV
Parallel Input Resistance	r_{ip}	3	$f=10.7MHz$	—	8	—	k Ω
Parallel Input Capacitance	c_{ip}	3	$f=10.7MHz$	—	5	—	pF
Parallel Output Resistance	r_{op}	4	$f=10.7MHz$	—	200	—	k Ω
Parallel Output Capacitance	c_{op}	4	$f=10.7MHz$	—	2.5	—	pF

EQUIVALENT CIRCUIT

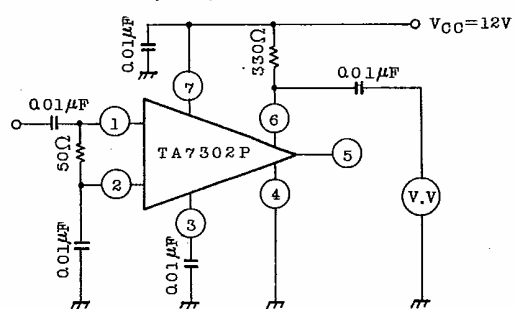


TEST CIRCUIT

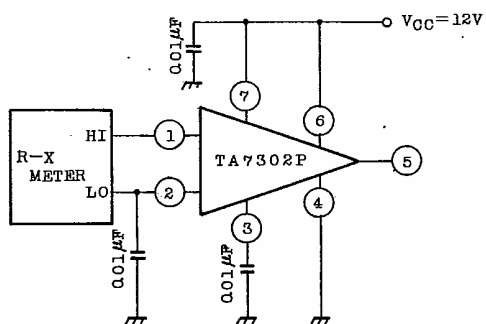
1. I_{CC} , I_6 , V_5



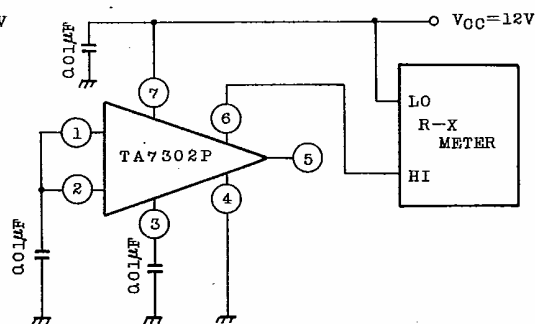
2. G_V , $V_{IN(lim)}$

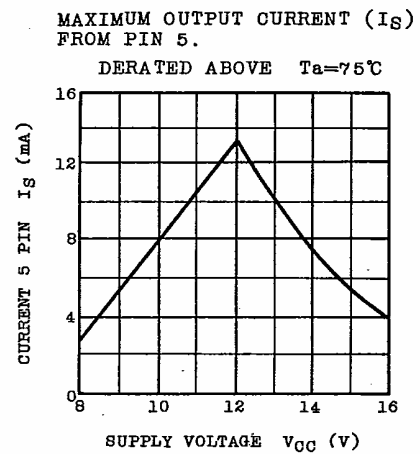
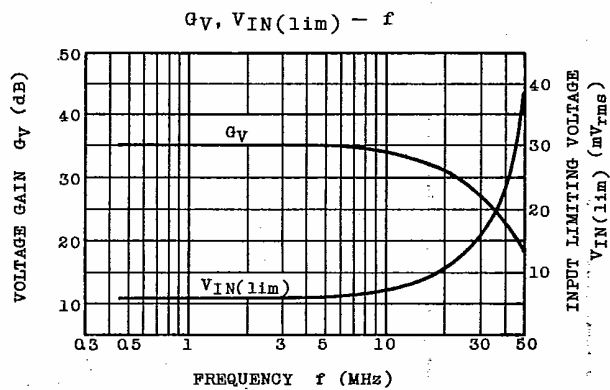
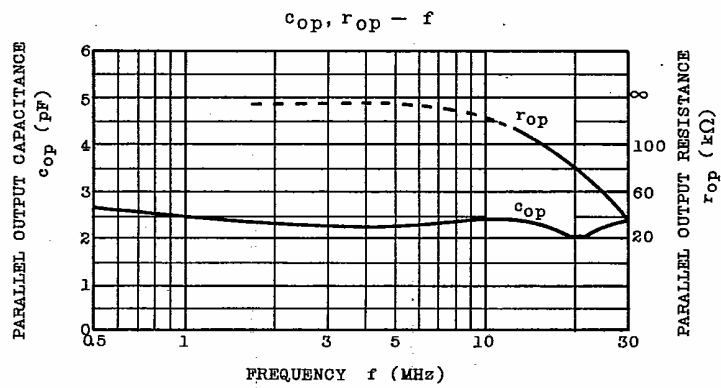
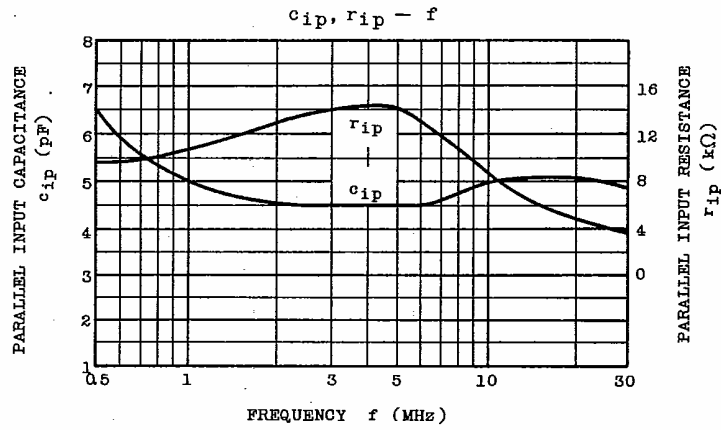


3. r_{ip} , c_{ip}

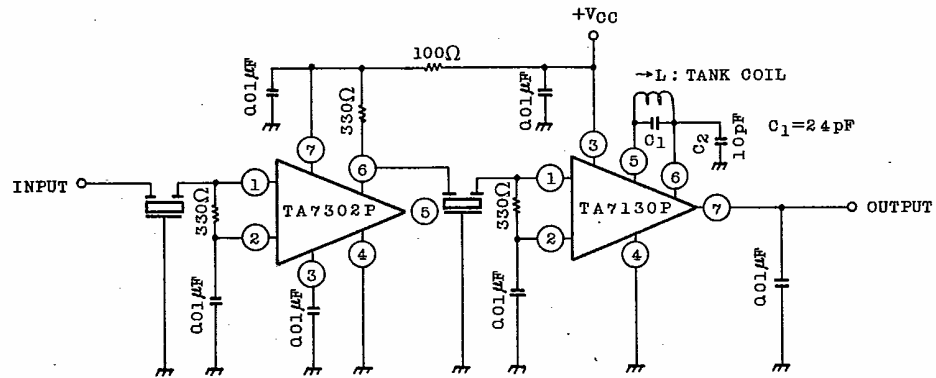


4. r_{op} , c_{op}





APPLICATION CIRCUIT



TANK COIL

WIRE 2 UEW 0.08mm ϕ
 TURNS 21
 Qu 130 $\pm$ 15%

V_{OD}, THD, AMR - V_{IN}

