

TA7302P

FOR FM IF AMPLIFIER WIDE-BAND AMPLIFIER

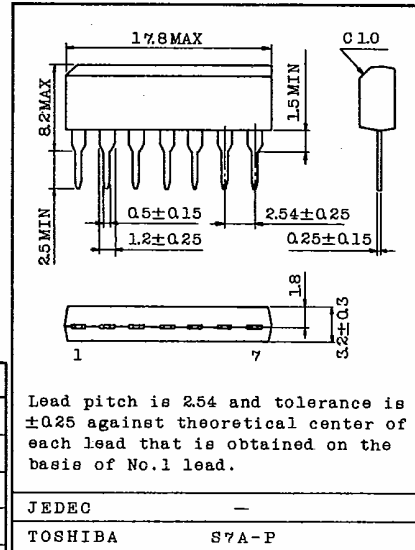
- High Sensitivity : $V_{IN(1im)}=78dB\mu V$ (Typ.)
- Wide Frequency Capability
- Regulated Voltage Output
- Wide Operating Supply Voltage Range : $V_{CC}=8 \sim 16V$

MAXIMUM RATINGS (Ta=25°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 ~ 75	°C
Storage Temperature	T _{stg}	-55 ~ 150	°C

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

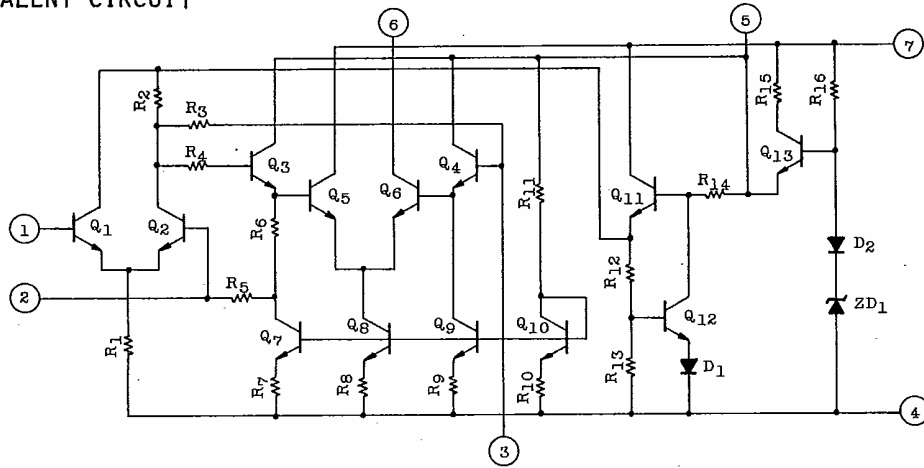
Unit in mm



ELECTRICAL CHARACTERISTICS (Ta=25°C, V_{CC}=12V)

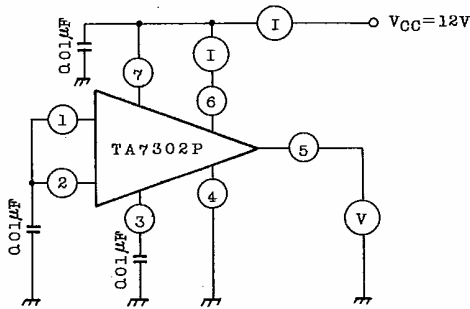
CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Current	I _{CC}	1	-	6.4	9.4	12.4	mA
6 pin Current	I ₆	1	-	1.3	2.0	2.6	mA
5 pin Voltage	V ₅	1	-	5.7	-	6.9	V
Voltage Gain	G _v	2	f=10.7MHz, V _{in} =60dBμV	31	34	37	dB
Input Limiting Voltage	V _{IN(1im)}	2	f=10.7MHz, V _O =-3dB	-	78	-	dBμV
Parallel Input Resistance	r _{ip}	3	f=10.7MHz	-	8	-	kΩ
Parallel Input Capacitance	c _{ip}	3	f=10.7MHz	-	5	-	pF
Parallel Output Resistance	r _{op}	4	f=10.7MHz	-	200	-	kΩ
Parallel Output Capacitance	c _{op}	4	f=10.7MHz	-	2.5	-	pF

EQUIVALENT CIRCUIT

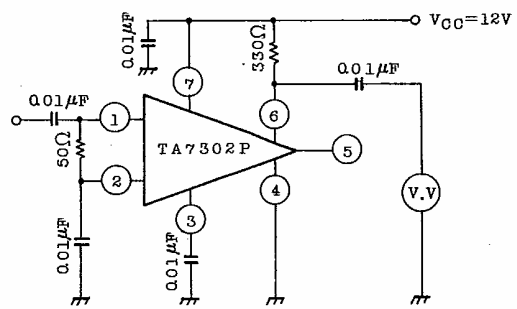


TEST CIRCUIT

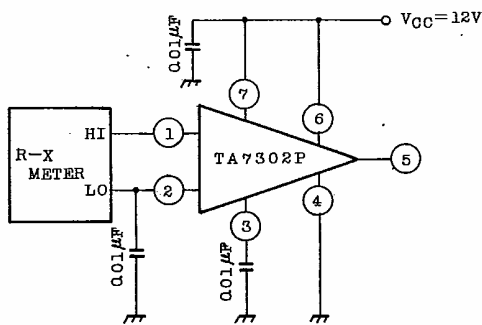
1. I_{CC} , I_6 , V_5



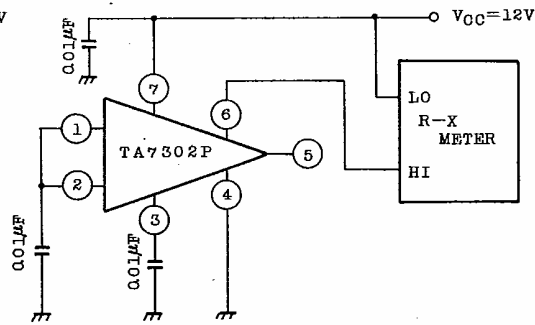
2. G_V , $V_{IN(lim)}$

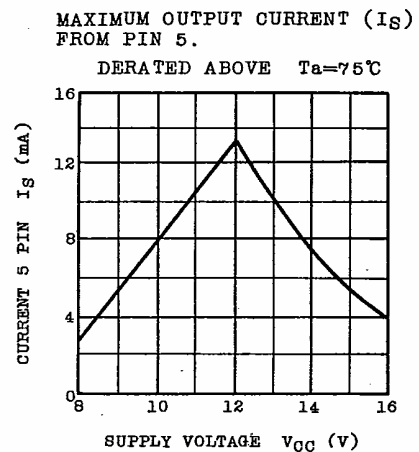
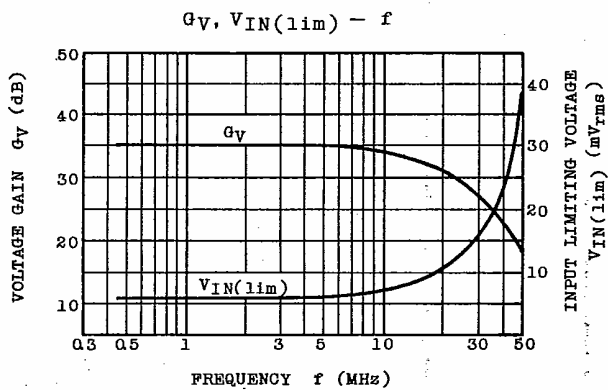
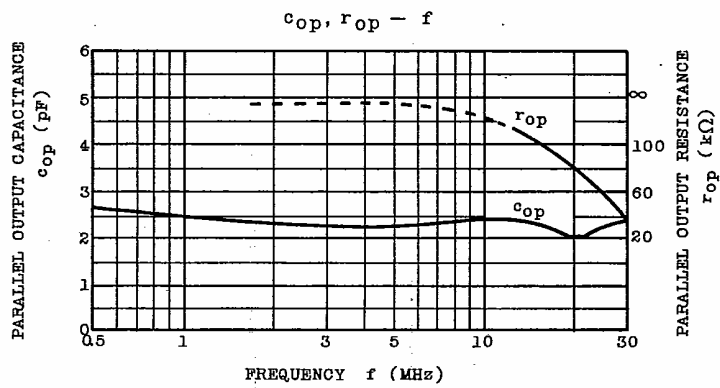
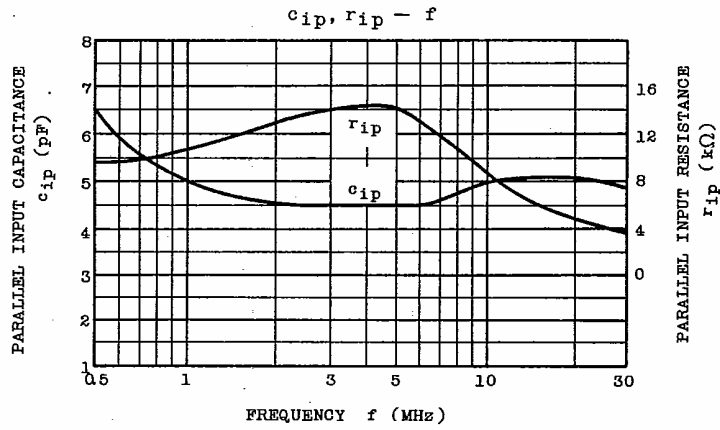


3. r_{ip} , c_{ip}

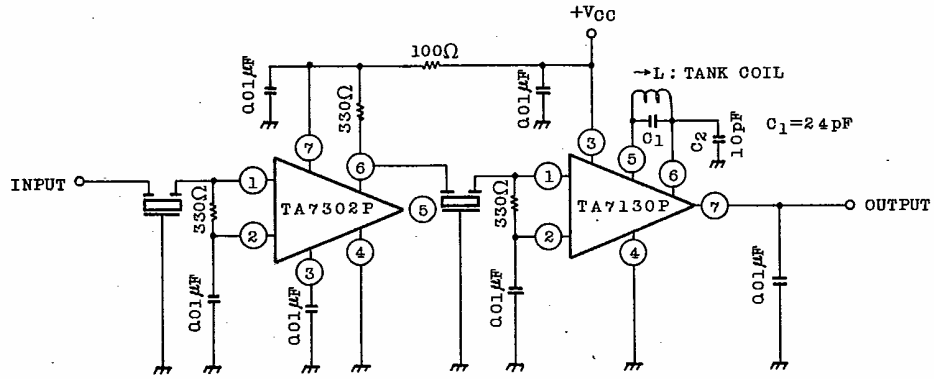


4. r_{op} , c_{op}





APPLICATION CIRCUIT



TANK COIL

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

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

