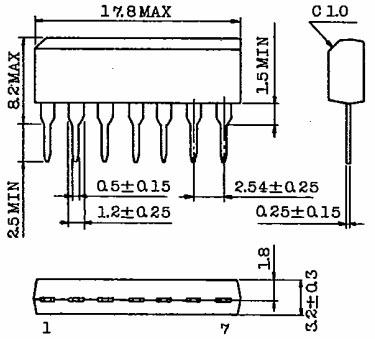
TA7302P

FOR FM IF AMPLIFIER

WIDE-BAND AMPLIFIER

- High Sensitivity : $V_{IN(lim)}$=78dBμV (Typ.)
- Wide Frequency Capability
- Regurated Voltage Output
- Wide Operating Supply Voltage Range : V_{CC}=8～16V

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	S7A-P

MAXIMUM RATINGS (Ta=25°C)

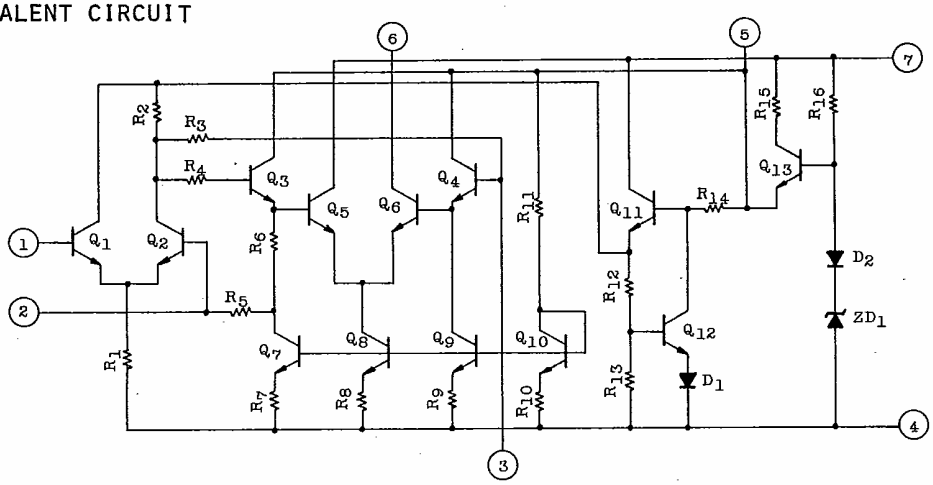
CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V_{CC}	16	V
5 pin Output Current	I_5	13	mA
Power Dissipation (Note)	P_D	500	mW
Operating Temperature	Topr	-25～75	°C
Storage Temperature	T_{stg}	-55～150	°C

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

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

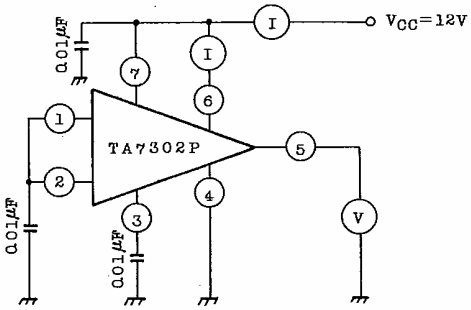
CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Current	I_{CC}	1	-	6.4	9.4	12.4	mA
6 pin Current	I_6	1	-	1.3	2.0	2.6	mA
5 pin Voltage	V_5	1	-	5.7	-	6.9	V
Voltage Gain	G_V	2	f=10.7MHz, V_{in}=60dBμV	31	34	37	dB
Input Limiting Voltage	$V_{IN(lim)}$	2	f=10.7MHz, V_O=-3dB	-	78	-	dBμV
Parallel Input Resistance	rip	3	f=10.7MHz	-	8	-	kΩ
Parallel Input Capacitance	cip	3	f=10.7MHz	-	5	-	pF
Parallel Output Resistance	rop	4	f=10.7MHz	-	200	-	kΩ
Parallel Output Capacitance	cop	4	f=10.7MHz	-	2.5	-	pF

EQUIVALENT CIRCUIT

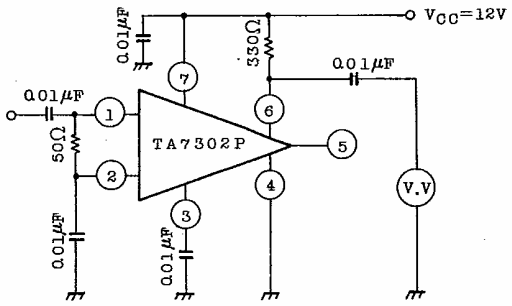


TEST CIRCUIT

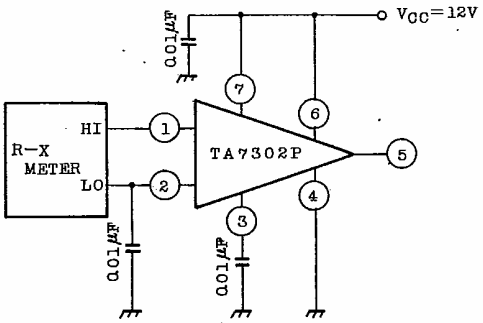
1. I_{CC}, I_6, V_5



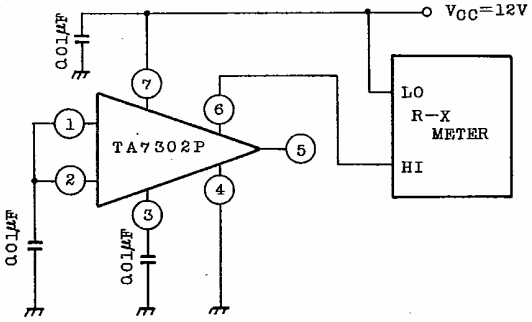
2. G_V, $V_{IN(lim)}$



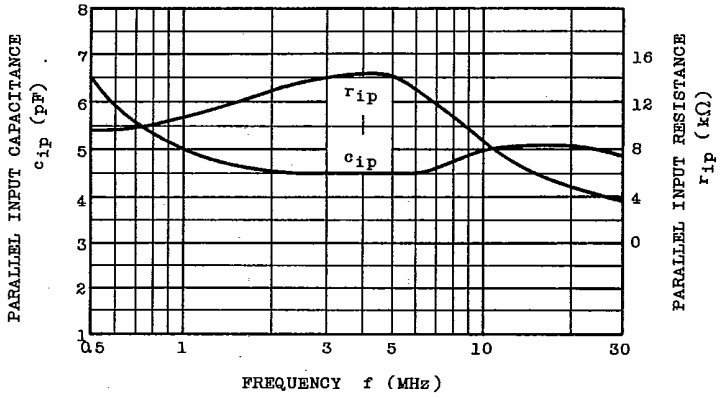
3. rip, cip



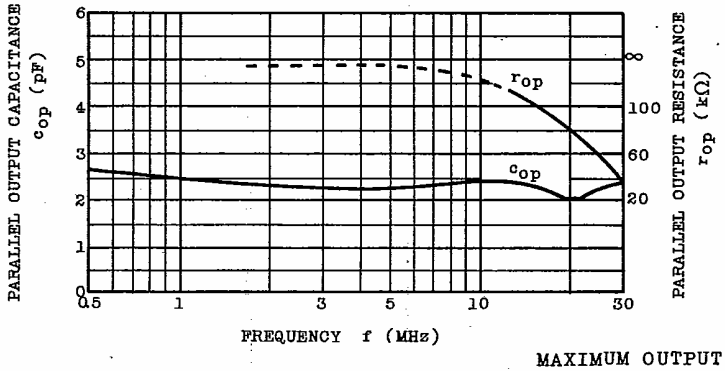
4. rop, cop



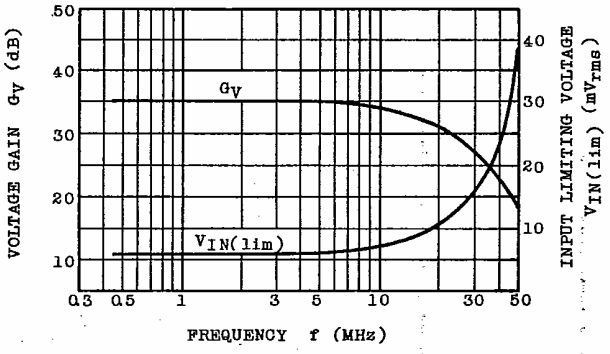
$c_{ip}, r_{ip} - f$



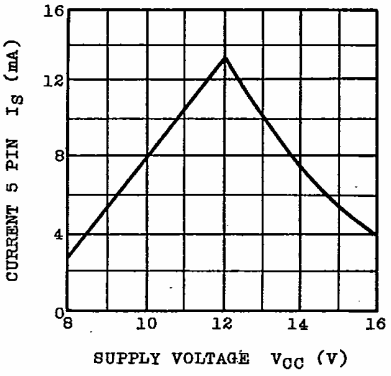
$c_{op}, r_{op} - f$



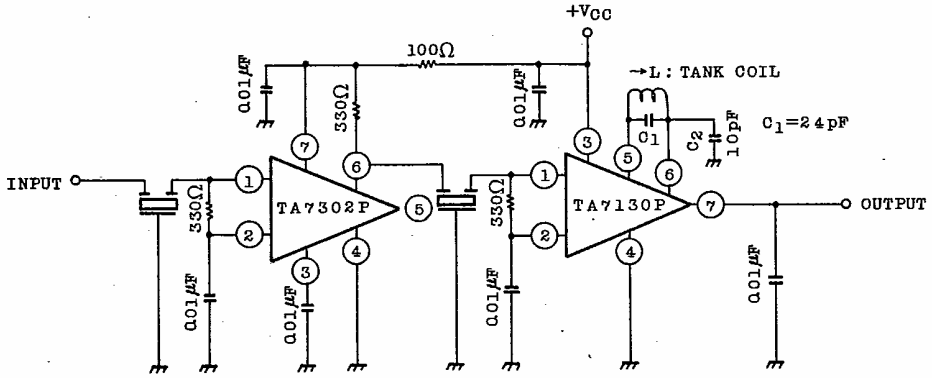
$G_V, V_{IN(lim)} - f$



MAXIMUM OUTPUT CURRENT (I_S)
FROM PIN 5.
DERATED ABOVE Ta=75℃



APPLICATION CIRCUIT



TANK COIL

WIRE	2 UEW 0.08mmØ
TURNS	21
Qu	130±15%

V_{OD}, THD, AMR — V_{IN}