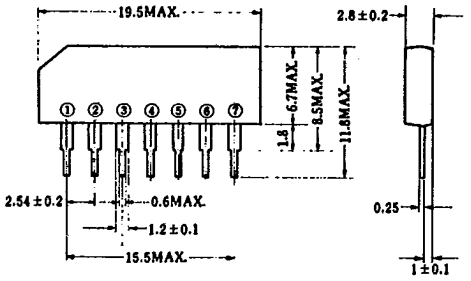
ECG1092

RF/IF AMPLIFIER USEABLE TO 150 MHZ

Basing

1	OUT PUT	5	INPUT HIGH
2	V'	6	GND
3	BIAS	7	INPUT LOW
4	TAB – Ground		

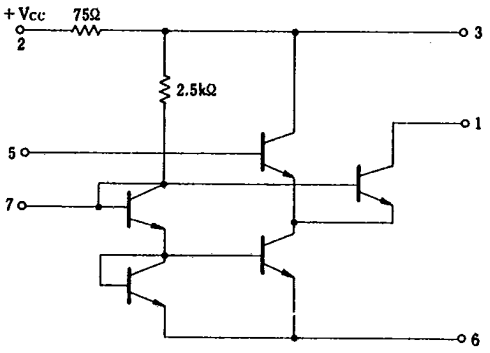
Outline (mm)



Absolute Maximum Ratings (Ta=25°C)

V_{CC}	20	V
V_1	24	V
V_{5-7}	±5.0	V
Pd	300	mW
Ta	−20 ~ +75	°C
T_{stg}	−40 ~ +125	°C

Equivalent Circuit

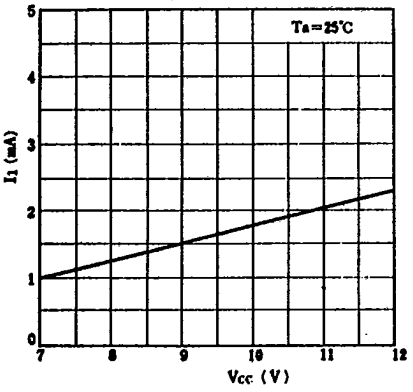


Electrical Characteristics (V_{CC}=12V, Ta=25°C)

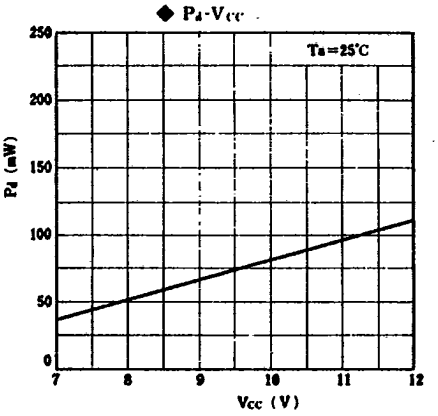
TEST	CONDITIONS	MIN.	TYP.	MAX.	UNITS
P_d	e_{in}=0		110	170	mW
I_1	e_{in}=0	1.9	2.5	3.1	mA
i_{opp}	e_{in}=400mVrms, f≤1kHz	3.6			mA_{P-P}
V_0(sat)				1.7	V
	e_{in}=10mVrms, f≤1kHz	29	35		mʊ
g_{in}	e_{in}≤10mVrms, f≤5MHz		0.30	0.43	mʊ
c_{in}	e_{in}≤10mVrms, f≤5MHz		6.0		pF
c_o	f≤5MHz		2.0		pF
g_o	e_o≤100mVrms, f≤5MHz		0.015	0.04	mʊ
A_{v1}	f=10.7MHz, R_L=1kΩ * R_{in}=50Ω		31		dB
A_{v1}	f=100MHz, R_L=500Ω *		1.8		dB

* Test Circuit # 1

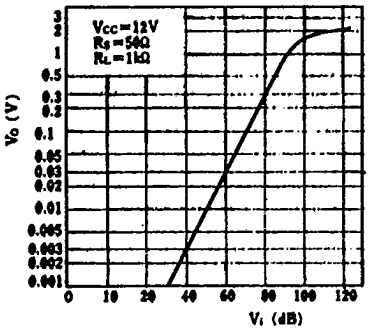
◆ I_1-V_{CC}



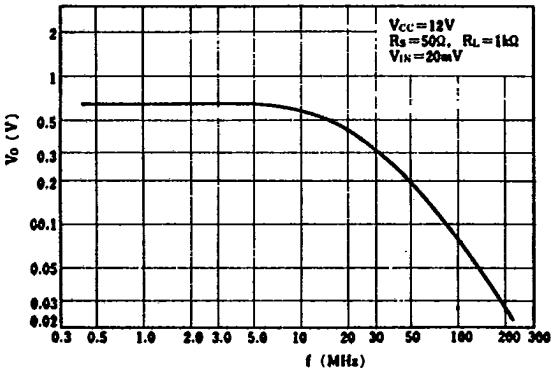
◆ P_d-V_{CC}



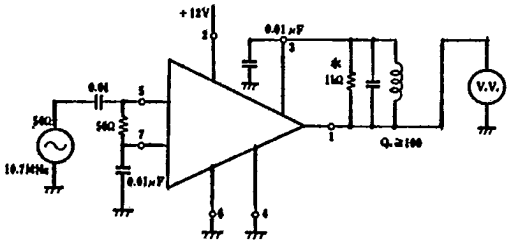
◆ V_O-V_i



◆ V_O-f



Test Circuit # 1 10.7MHz



* 500 Ω at 100 MHZ

Iopp Test Circuit