

KA2249/D

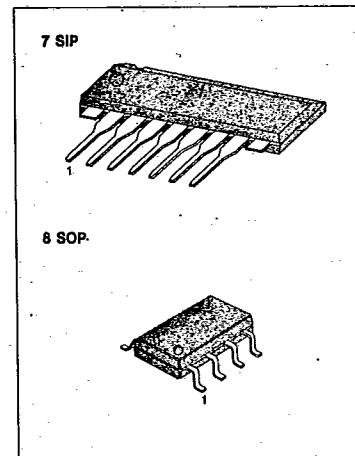
LINEAR INTEGRATED CIRCUIT

FM FRONT END FOR PORTABLE RADIO

The KA2249/D is a monolithic integrated circuit designed for FM front end of the portable radio.

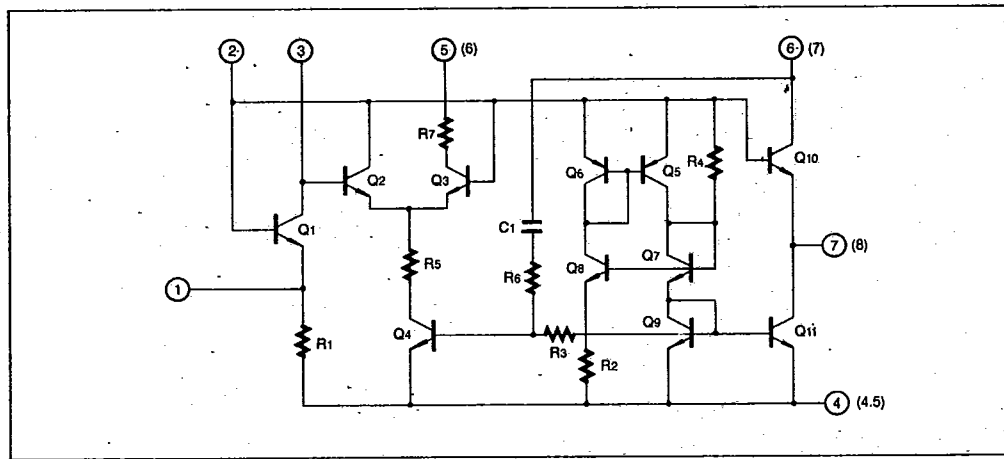
FEATURES

- High frequency amplifier, frequency converter, local oscillator.
- Wide operating voltage: $V_{CC} = 2V \sim 7V$ (KA2249)
 $V_{CC} = 2V \sim 5V$ (KA2249D)
- Low current consumption: Typ. 2mA ($V_{CC} = 4V$).



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SCHEMATIC DIAGRAM



(): KA2249D

Fig. 1

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ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Characteristic	Symbol	Value	Unit
Supply Voltage	V _{CC}	7	V
Terminal Voltage	V (3~4)	14	V
	V (5~4)		
	V (6~4)		
Power Dissipation (Ta=75°C)	P _d	30	mW
Operating Temperature	T _{opr}	-20 ~ +75	°C
Storage Temperature	T _{stg}	-55 ~ +125	°C

ELECTRICAL CHARACTERISTICS

(Ta=25°C; V_{CC}=4V, unless otherwise specified)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit	Fig
Circuit Current	I _{CC}	V _i =0	1.4		3.0	mA	2
Output Voltage	V _o	V _i =70dBμ, 106MHz	30.5		68.5	mV	3
Oscillation Voltage	V _{osc}	V _{CC} =2V	130			mV	3

TEST CIRCUIT 1

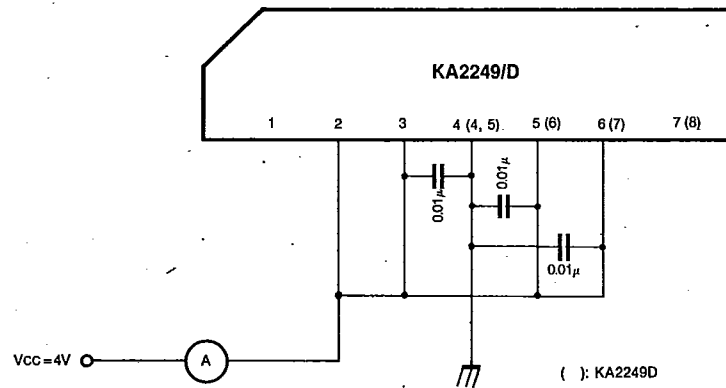


Fig. 2

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TEST CIRCUIT 2 (V_o , V_{osc})

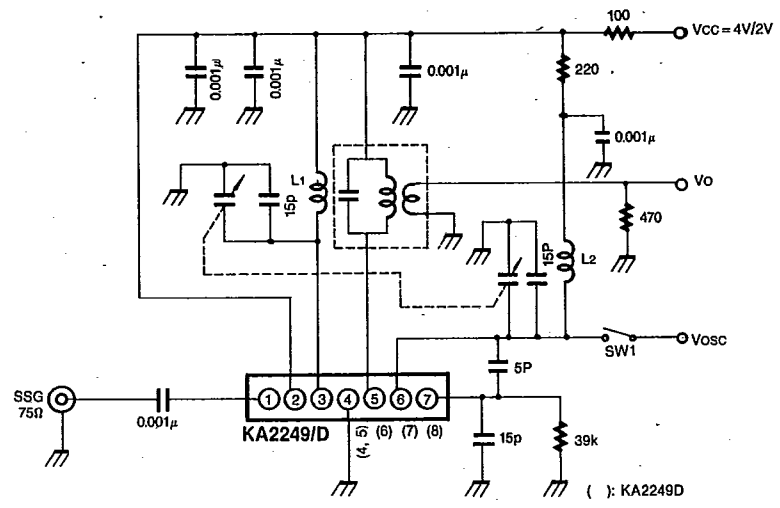
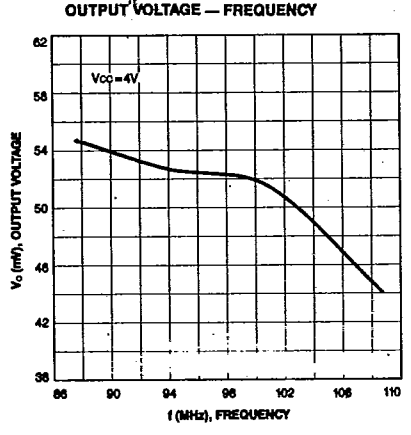
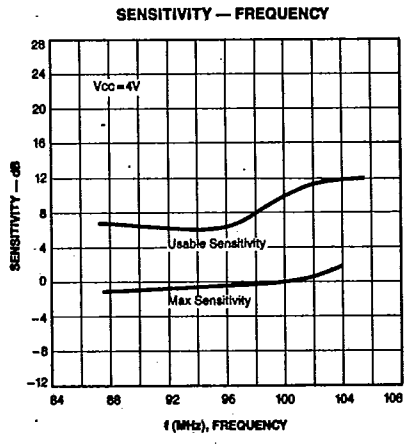


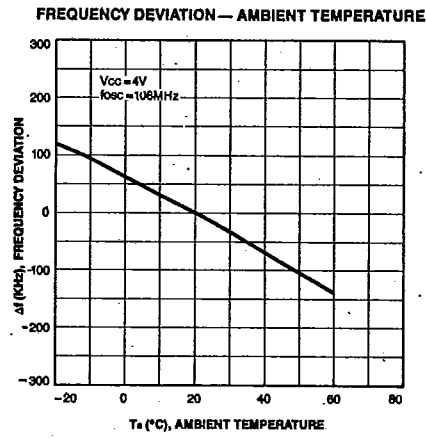
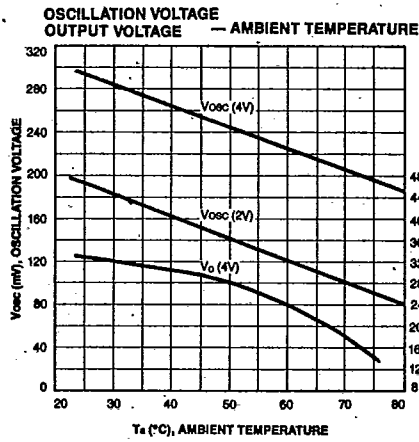
Fig. 3



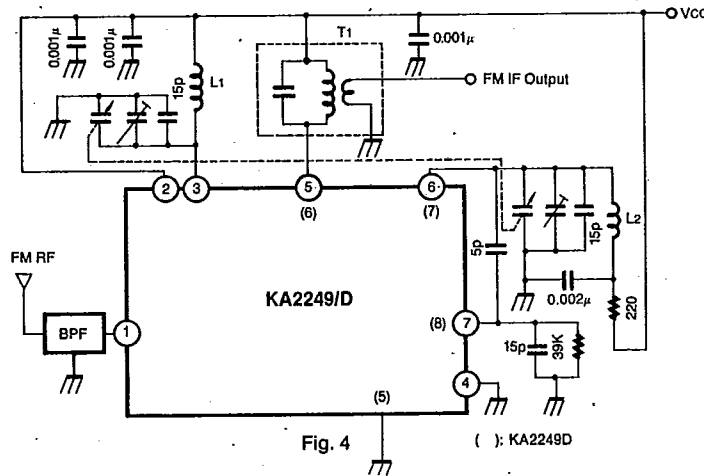
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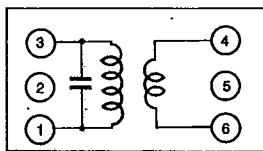
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APPLICATION CIRCUIT



**COIL SPECIFICATION
T1 FM IFT**



C ₀ (pF)	f (MHz)	Q ₀ (%)	TURNS	
			1-3	4-6
56	10.7	95	12	2

Seoul Jupa
SJ-015-382
0.1mmφ UEW