

SANYO	No.507F	LA1150N
		FM IF Amplifier for Car Radio

Functions

- 3 stage differential IF amplifier
- Differential peak detector

Features

- Easy adjustment
- Large output voltage
- Good limiter characteristic
- Wide operating voltage
- Low distortion
- Fewer peripheral parts
- Excellent AM rejection ratio

Maximum Ratings at Ta = 25°C

			unit
Maximum Supply Voltage	V _{CC} max	16	V
Input Voltage	V _{IN}	0.7	V _{rms}
Allowable Power Dissipation	P _d max	*400	mW
Operating Temperature	T _{opr}	-20 to +80	°C
Storage Temperature	T _{stg}	-40 to +125	°C

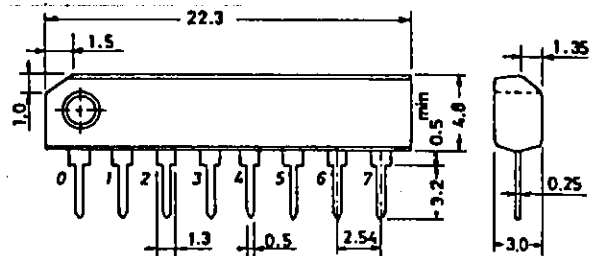
* Derate 4mW/°C above Ta = 25°C

Recommended Operating Condition at Ta = 25°C

		unit
Recommended Supply Voltage	V _{CC}	12 V

Operating Characteristics at Ta = 25°C, V_{CC} = 12V, f = 10.7MHz, f_M = 400Hz 100% mod.

			min	typ	max	unit
Current Dissipation	I _{CC}		8	12	15	mA
DC Voltage at Pin 7	V ₇		3.7	4.4	5.2	V
Demodulated Output	v _o	v _{in} = 80dBμV	400	500	600	mV _{rms}
Input Limiting Voltage	V _{in(lim)}	-3dB limiting		50	55	dBμV
Total Harmonic Distortion	THD	v _{in} = 80dBμV		0.2	0.3	%
Signal to Noise Ratio	S/N	v _{in} = 80dBμV	70	80		dB
AM Rejection Ratio	AMR	AM 1kHz 30% mod	47	53		dB
Output Resistance	r _o	f = 400Hz	6.2	7.7	9.5	kΩ

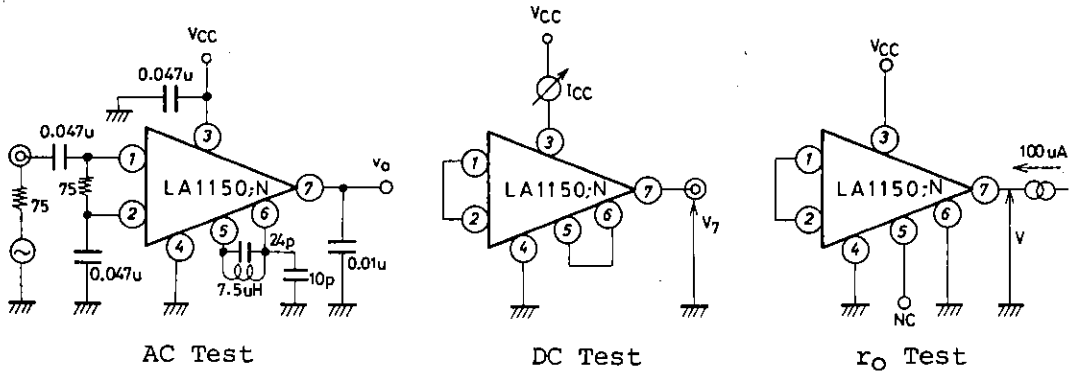
Package Dimensions 3060-S8IC
(unit: mm)

SANYO: SFP8

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TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

LA1150N

Test Circuit



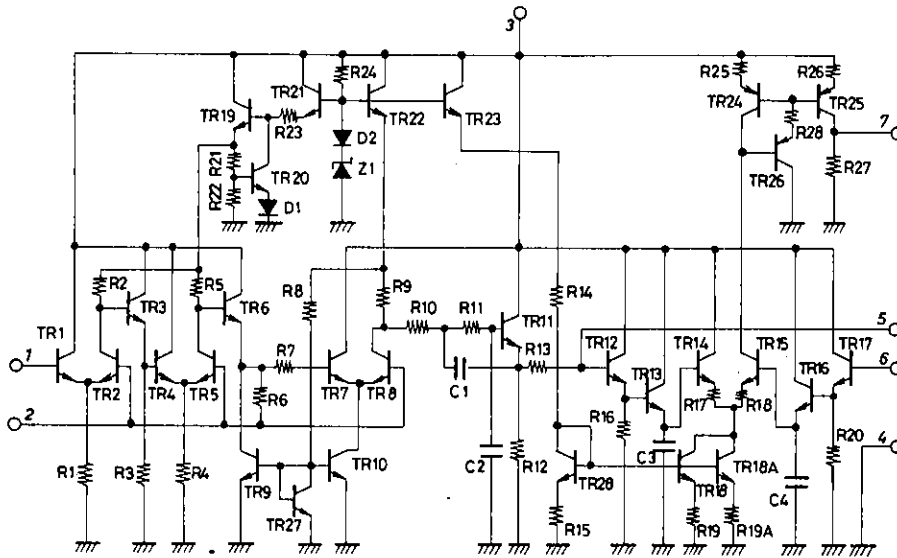
AC Test

DC Test

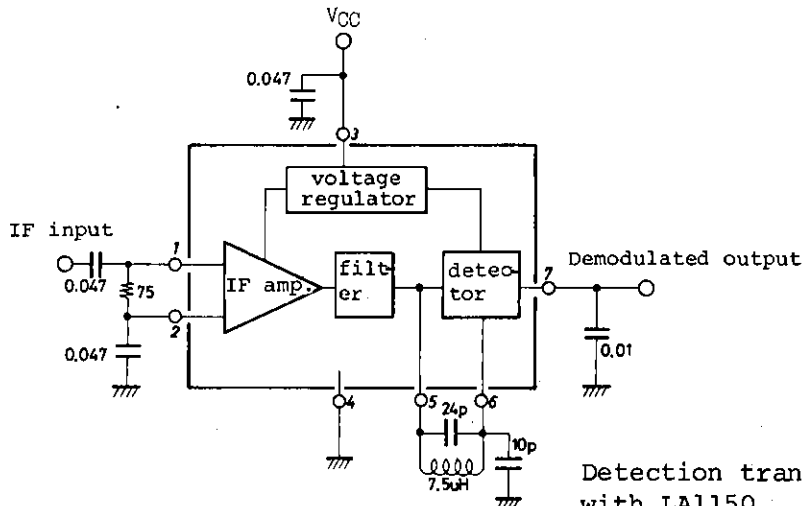
r_o Test

Unit (resistance: Ω , capacitance: F)

Equivalent Circuit



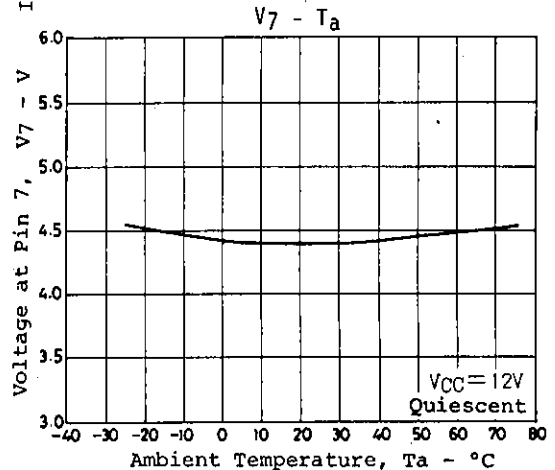
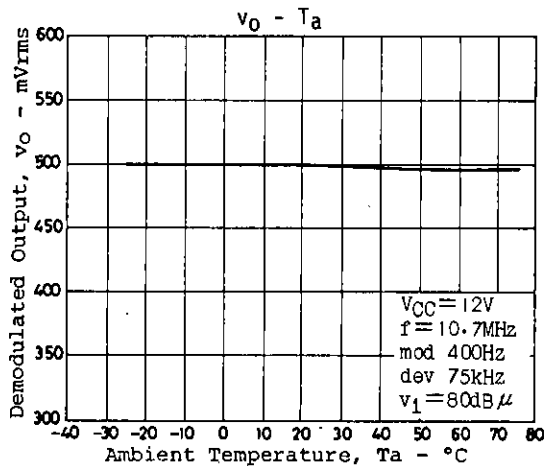
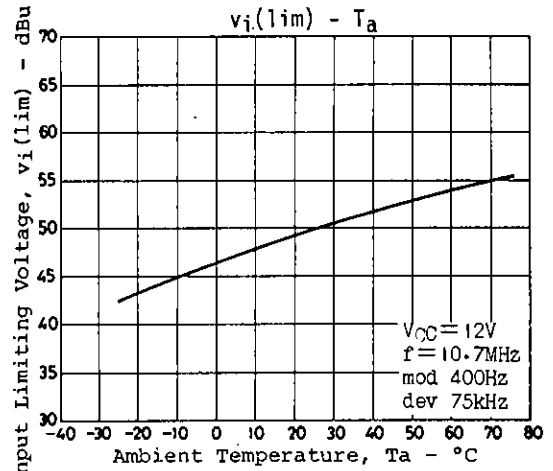
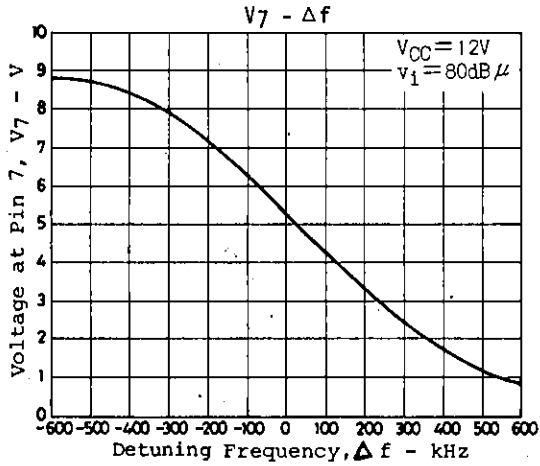
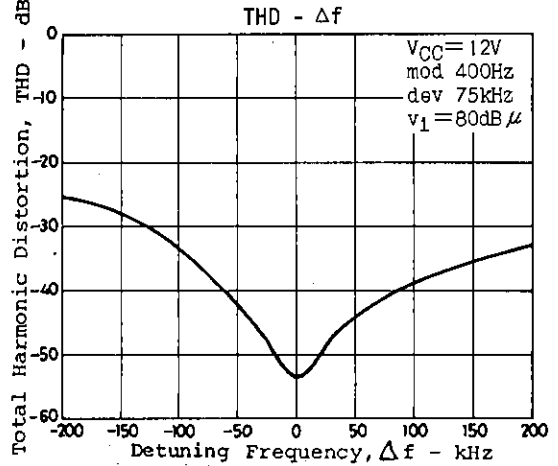
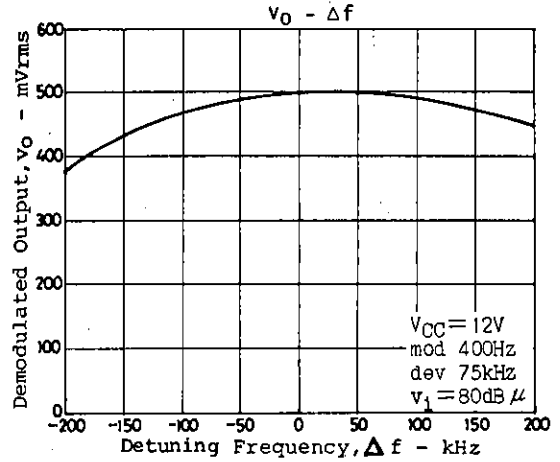
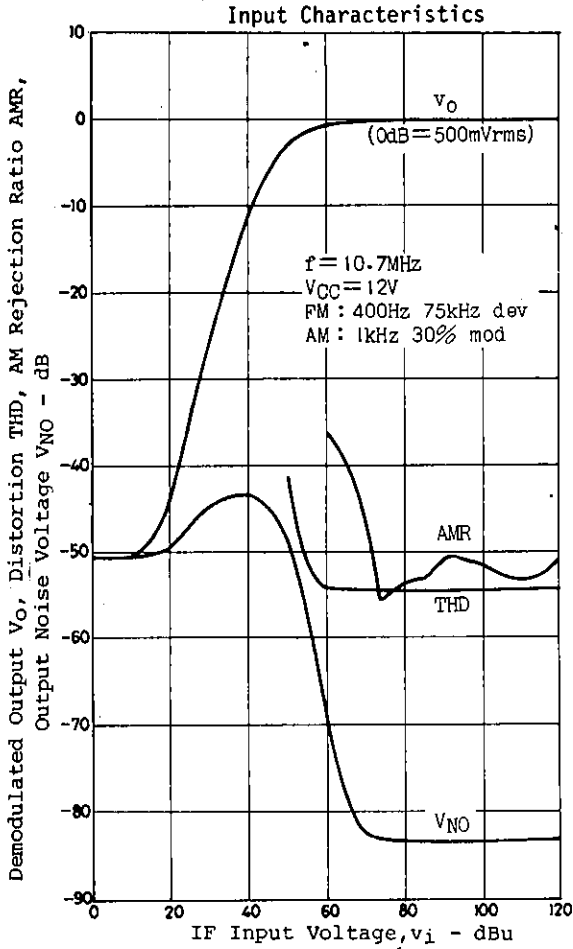
Sample Application Circuit

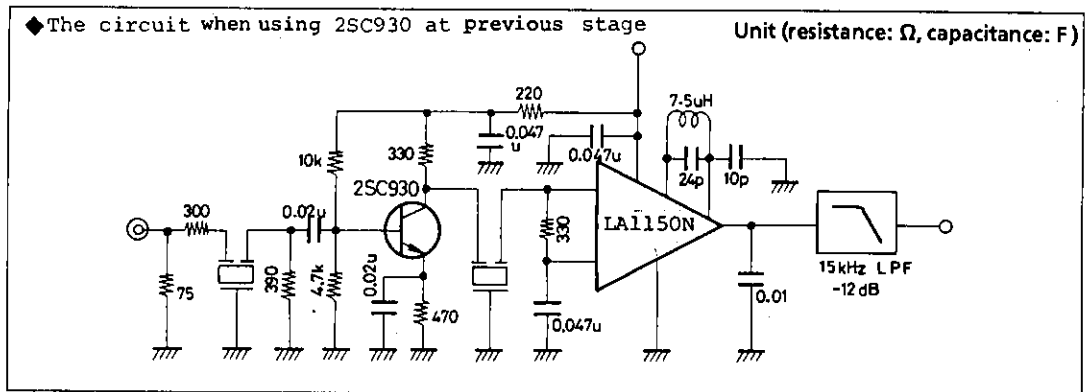
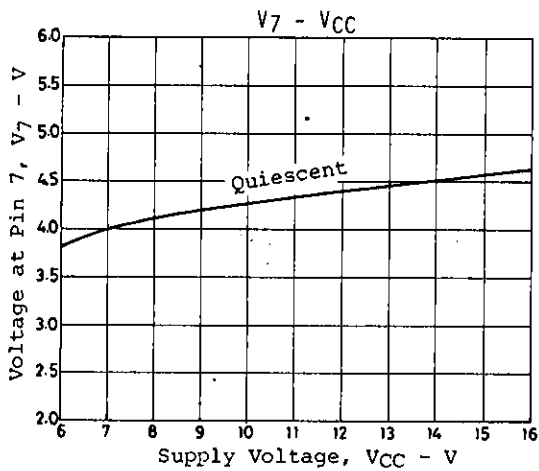
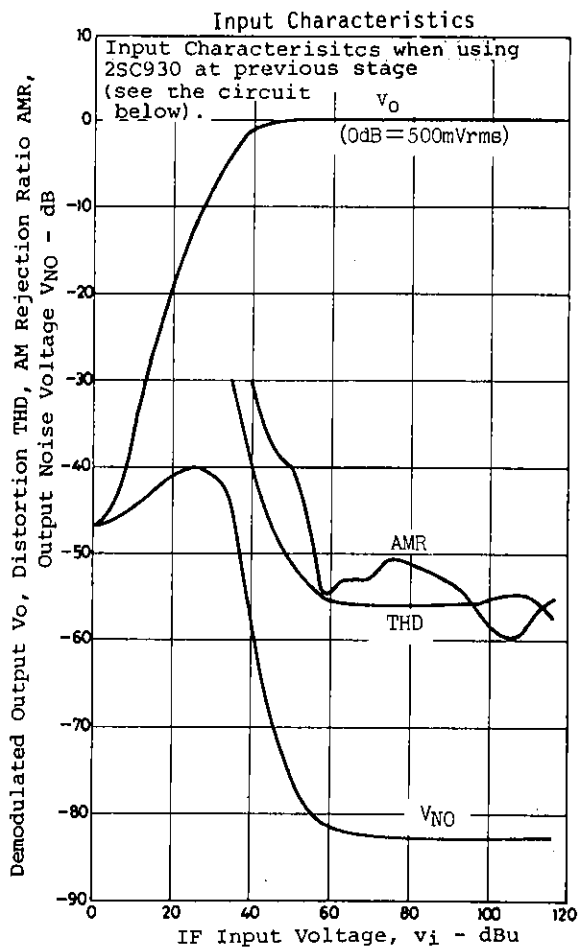
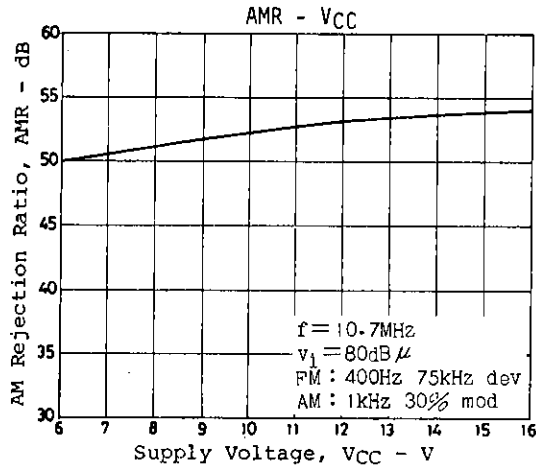
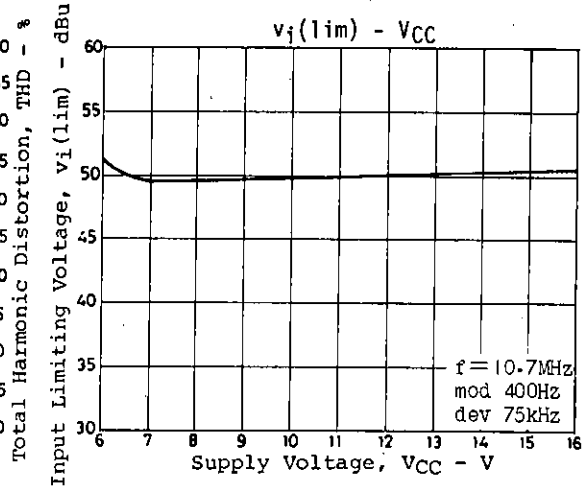
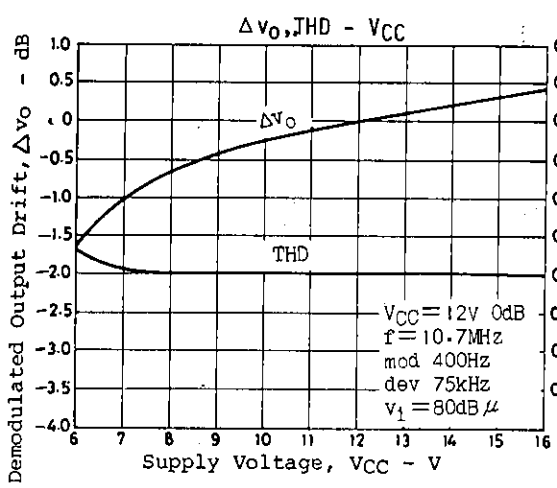


Detection transformer to be used with LA1150

Sumida :47k-074-003, 44M-052-1440
 Toko :119AN-13922Z, 199CN-10504Z
 Sanyo Musen:DC-10, DC-7

Unit (resistance: Ω , capacitance: F)





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