

AN7411

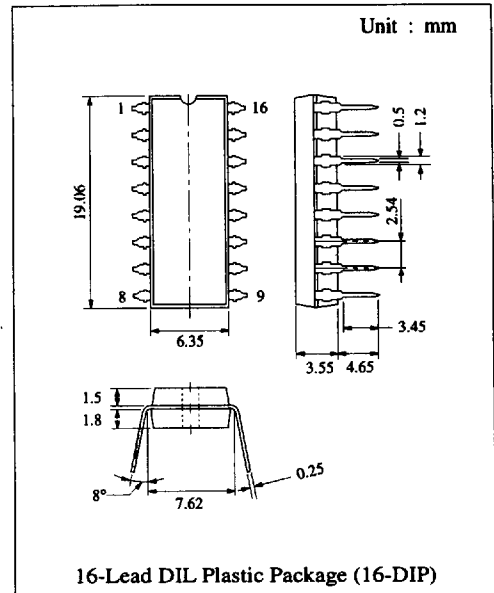
FM Stereo Multiplex Demodulator

■ Description

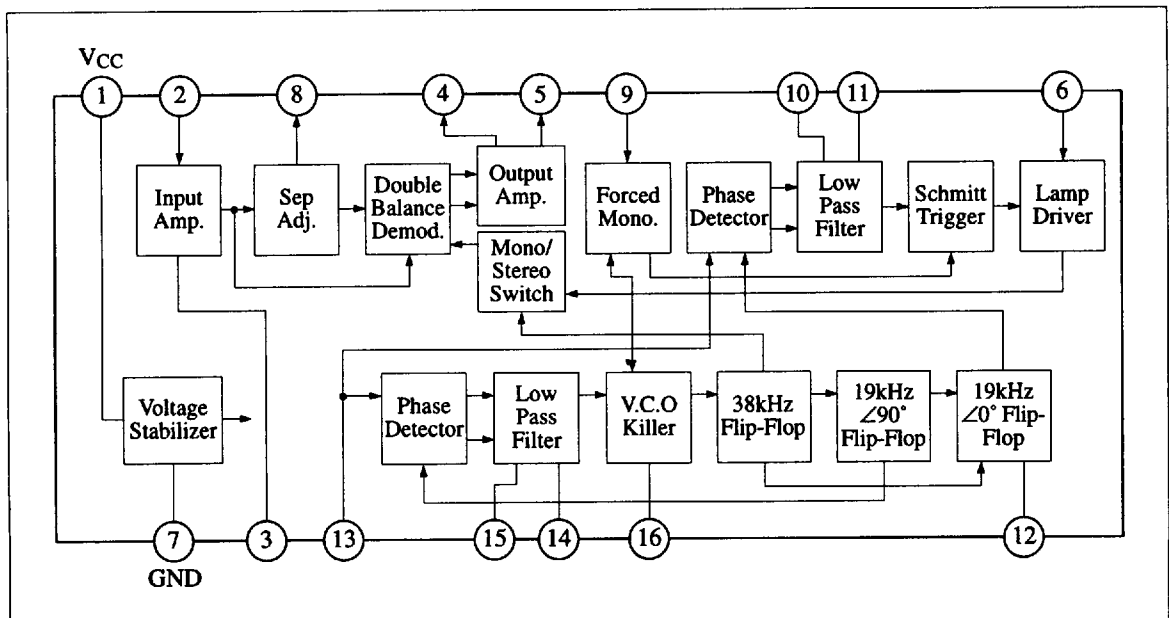
The AN7411 is a monolithic integrated circuit designed for low voltage operating FM multiplex demodulator.

■ Features

- LED mis-tuning protection circuit at transient operation voltage
- High performance (small gain loss, low distortion)
- Provided with forced monaural and VCO stop circuits
- Wide operating supply voltage: $V_{CC} = 3.6V \sim 14.4V$



■ Block Diagram



■ Absolute Maximum Ratings (Ta=25°C)

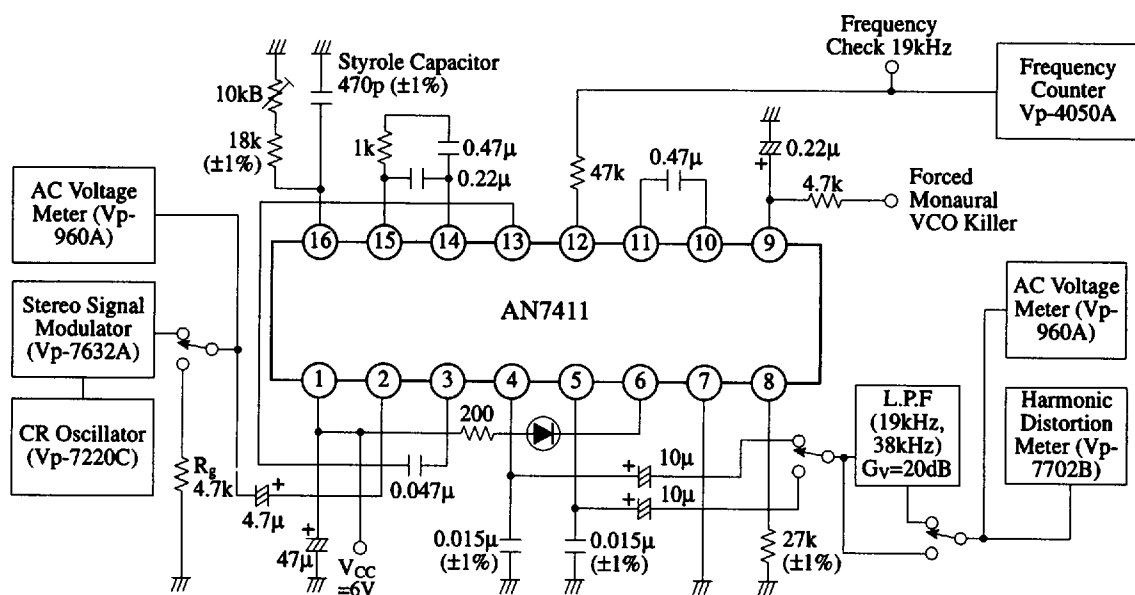
Item	Symbol	Rating	Unit
Supply Voltage	V _{CC}	14.4	V
Terminal Voltage	V ₆₋₇	14.4	V
Circuit Current	I ₆	75	mA
Power Dissipation	P _D	360	mW
Operating Ambient Temperature	T _{opr}	-20 ~ +75	°C
Storage Temperature	T _{stg}	-55 ~ +125	°C

Operating Supply Voltage Range: $V_{CC} = 3.6V \sim 14.4V$

■ Electrical Characteristics (V_{CC}=6V, Ta=25°C)

Item	Symbol	Condition	min.	typ.	max.	Unit
Total Current	I_{tot}	$V_{in} = 0mV$	9	13	17	mA
Separation	Sep	$V_{(L+R)} = 135mV, f_m = 1kHz,$ $V_p = 15mV$	30	45		dB
Total Harmonic Distortion (Stereo)	THD			0.07	0.3	%
Total Harmonic Distortion (Monaural)	THD	$V_{in} = 150mV, f_m = 1kHz$		0.07	0.3	%
Output Voltage(Monaural)	V_O		135	155	180	mV
Channel Balance(Monaural)	CB		-1	0	+1	dB
Stereo Lamp ON Level	$V_{p(ON)}$	Pilot signal (19kHz)	3.5	5.5	7.5	mV

Test Circuit (De-emphasis: approximately $75\mu\text{s}$)



Note 1) VCO free-run frequency is adjusted to 19kHz (± 10 Hz) with frequency check terminal.

Note 2) Outer component should be in less than ($\pm 5\%$) unless otherwise specified.

L.P.F. (3L-13) is a filter amplifier with gain 20dB manufactured by Koringiken.

