



SANYO Semiconductors

DATA SHEET

LA4262 — Monolithic Linear IC Audio Output for Radio Cassette Recorder Two-channel 7W Power Amplifier

Overview

The LA4262 is a two-channel 7W power amplifier IC.

The LA4262 only requires a minimal number of external components and thus is optimal for use as the audio output power amplifier in radio cassette recorders.

Functions

- Output : 7W×2 ($V_{CC} = 15V$, $R_L = 3\Omega$)
- Standby function
- Pop noise reducing function
- Ripple filter
- Thermal protection circuit

Specifications

Maximum Ratings at $T_a = 25^\circ C$

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	V_{CC} max	$R_g = 0$ (No signal)	24	V
Allowable power dissipation	P_d max	With a infinity large heat sink	25	W
Thermal resistance	θ_{j-c}		3.0	$^\circ C/W$
Operating temperature	T_{opr}		-20 to +75	$^\circ C$
Storage temperature	T_{stg}		-40 to +150	$^\circ C$

Operating Conditions at $T_a = 25^\circ C$

Parameter	Symbol	Conditions	Ratings	Unit
Recommended supply voltage	V_{CC}		15	V
Recommended load resistance	R_L		3	Ω
Allowable operating voltage range	V_{CC} op	Under conditions where maximum ratings are not exceeded	5.0 to 22	V
Operating load resistance range	R_L op		2.7 to 8.0	Ω

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LA4262

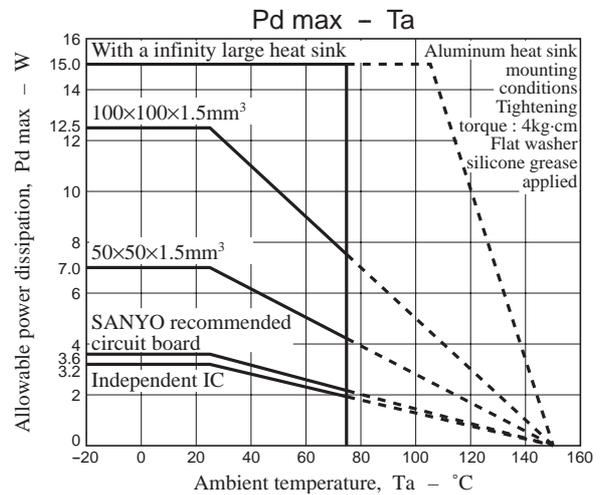
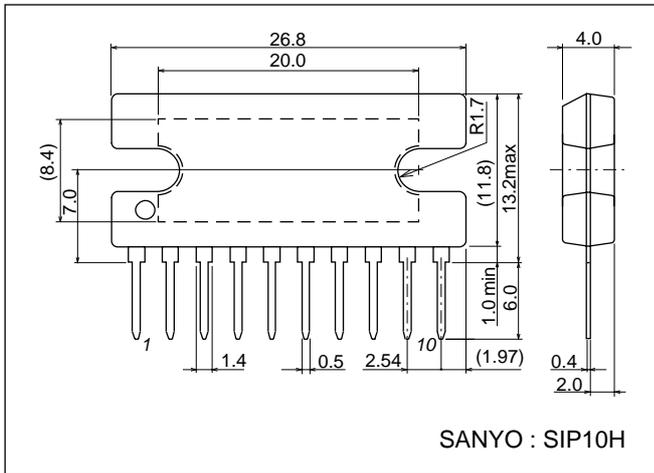
Electrical Characteristics at $T_a = 25^\circ\text{C}$, $V_{CC} = 15\text{V}$, $R_L = 3\Omega$, $f = 1\text{kHz}$, $R_g = 600\Omega$, in the specified circuit board

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Standby current	I_{st}	Standby pin→GND		1.0	10	μA
Quiescent current	I_{CCO}	$R_g = 0$	20	30	80	mA
Voltage gain	VG	$V_O = 0\text{dBm}$	33	35	37	dB
Total harmonic distortion	THD	$P_O = 1\text{W}$		0.15	0.6	%
Output noise voltage	V_{NO}	$R_g = 0$, DIN AUDIO		0.05	0.2	mV
Output power	P_{O1}	THD = 10%	6.0	7.0		W
	P_{O2}	$V_{CC} = 9\text{V}$, $R_L = 4\Omega$. THD = 10%	1.5	2.0		W
Channel separation	Chsep	$V_O = 0\text{dBm}$, $R_g = 0$, DIN AUDIO	50	60		dB
Ripple rejection ratio	SVRR	$V_r = 0\text{dBm}$, $R_g = 0$, $f_r = 100\text{Hz}$, DIN AUDIO	50	60		dB
Standby on voltage	V_{st}		1.5	5.0		V
Input resistance	R_i		20	30	40	$\text{k}\Omega$

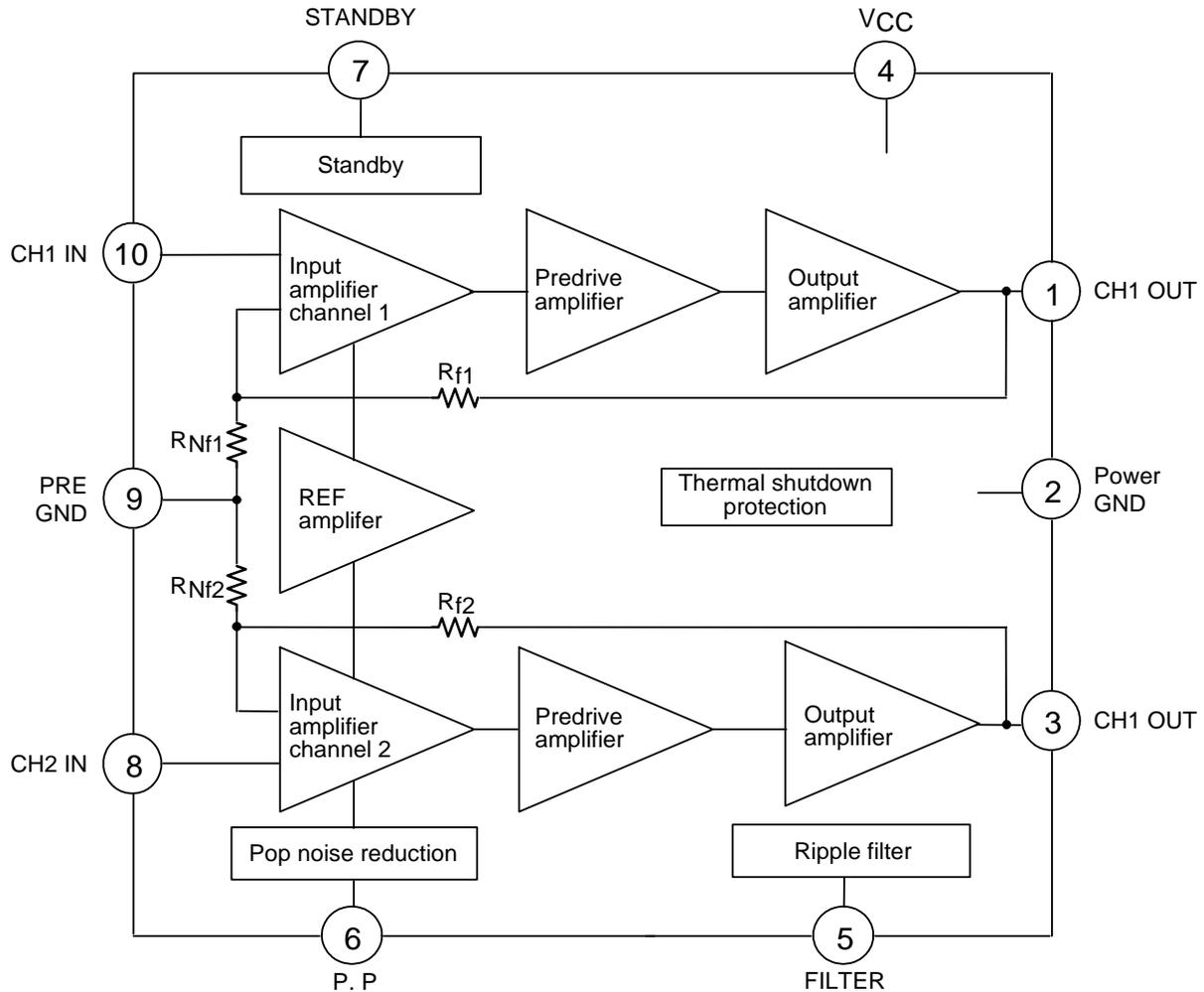
Package Dimensions

unit : mm (typ)

3024B



Block Diagram



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