



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  $T_a = 25^\circ\text{C}$ 

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

Operating Conditions at  $T_a = 25^\circ\text{C}$ 

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

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# LA4262

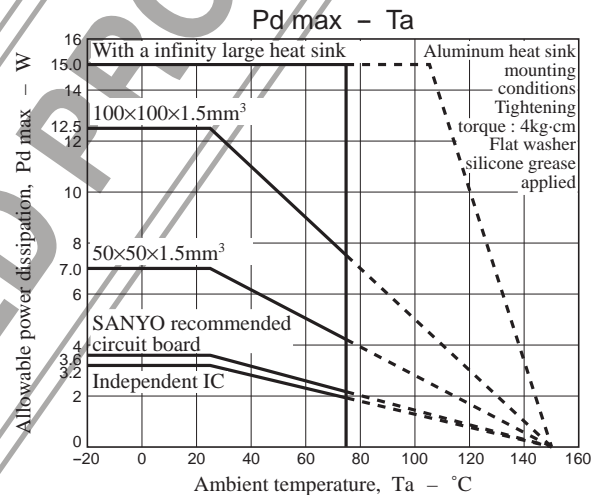
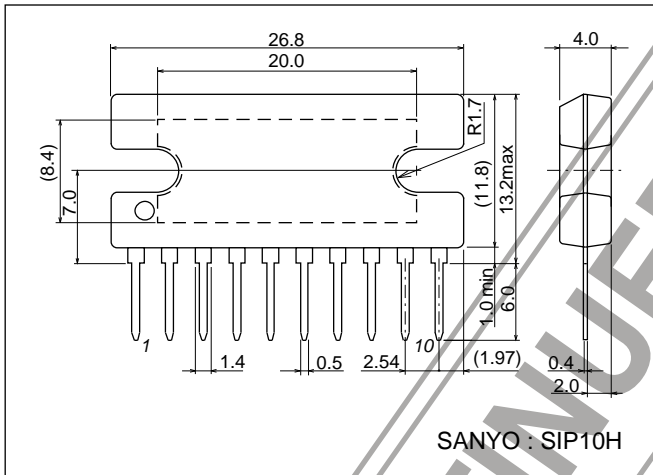
**Electrical Characteristics** at  $T_a = 25^\circ\text{C}$ ,  $V_{CC} = 15\text{V}$ ,  $R_L = 3\Omega$ ,  $f = 1\text{kHz}$ ,  $R_g = 600\Omega$ , in the specified circuit board

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Standby current	$I_{st}$	Standby pin→GND		1.0	10	$\mu\text{A}$
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

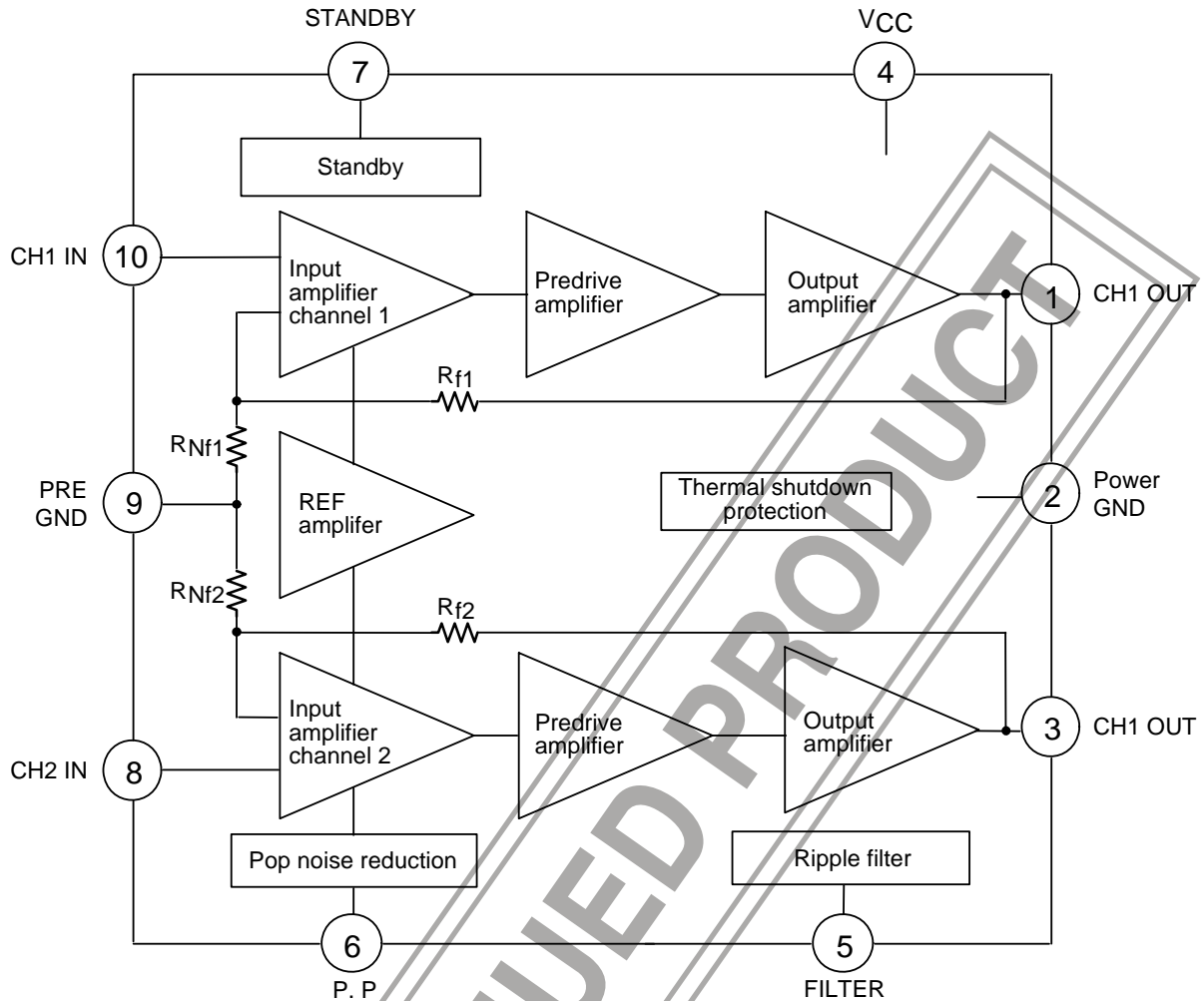
unit : mm (typ)

3024B



DISCONTINUED PRODUCT

## Block Diagram



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