



SANYO Semiconductors

## DATA SHEET

Monolithic Linear IC

# LA4263 — Power Amplifiers in TV and Audio Systems

## Overview

LA4263 is a power amplifiers in TV and audio systems.

## Functions

- Standby mode switch.
- Thermal protection circuit.

## Specifications

**Maximum Ratings** at  $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply rating	$V_{CC}$ max	$R_g = 0$ (no signal)	24.0	V
Allowable power dissipation	$P_d$ max	With an arbitrarily large heat sink.	15.0	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 operating voltage	$V_{CC}$		15.0	V
Recommended load resistance	$R_L$		3	$\Omega$
Operating supply voltage range	$V_{CC}$ op	Within the range such that the package $P_d$ rating is not exceeded.	5.0 to 22	V
Operating load resistance range			2.7 to 8.0	$\Omega$

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## LA4263

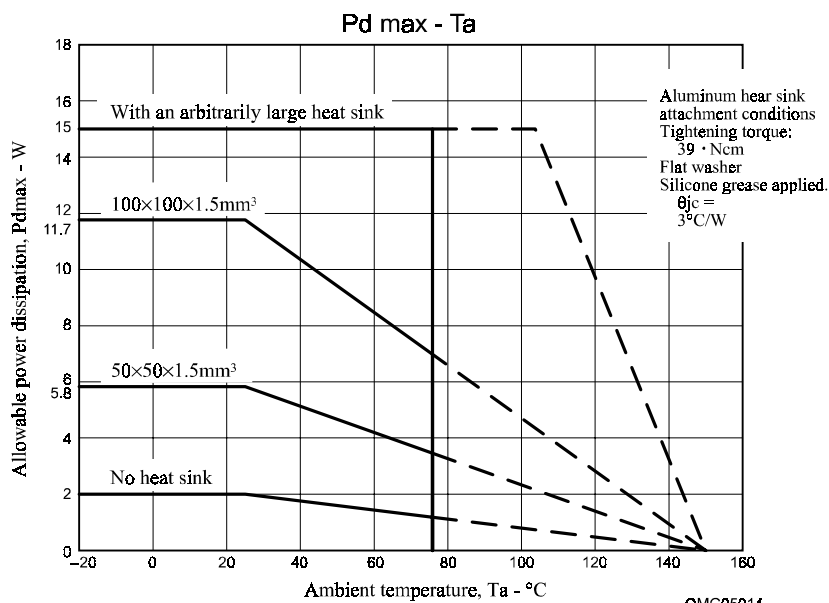
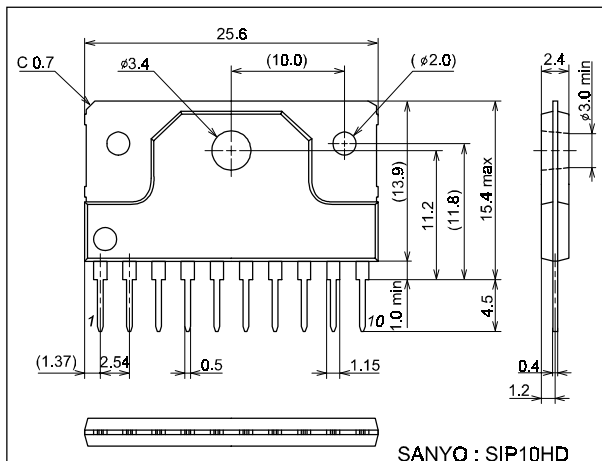
**Operating Characteristics** at  $T_a = 25^\circ\text{C}$ ,  $V_{CC} = 15\text{V}$ ,  $R_L = 3\Omega$ ,  $f = 1\text{kHz}$ ,  $R_g = 600\Omega$ , using the specified circuit board and the specified circuit

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Standby mode current	$I_{st}$	With the standby pin connected to ground → 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	$P_o = 1.0\text{W}$		0.15	0.6	%
Output noise voltage	$V_{no}$	$R_g = 0$ , BPF = 20Hz to 20KHz		0.05	0.2	mV
Output power	Po1	THD = 10%	6.0	7.0		W
	Po2	$V_{CC} = 9\text{V}$ , THD = 10%, $R_L = 4\Omega$	1.5	2.0		W
Channel separation	Ch sep	$V_o = 0\text{dBm}$ , $R_g = 0$ , BPF = 20Hz to 20KHz	50	60		dB
Ripple rejection ratio	SVRR	$V_r = 0\text{dBm}$ , $R_g = 0$ , $f_r = 100\text{Hz}$ , BPF = 20Hz to 20KHz	50	60		dB
Standby on voltage	$V_{st}$		1.5	5.0		V
Input resistance	$R_i$		20	30	40	$k\Omega$

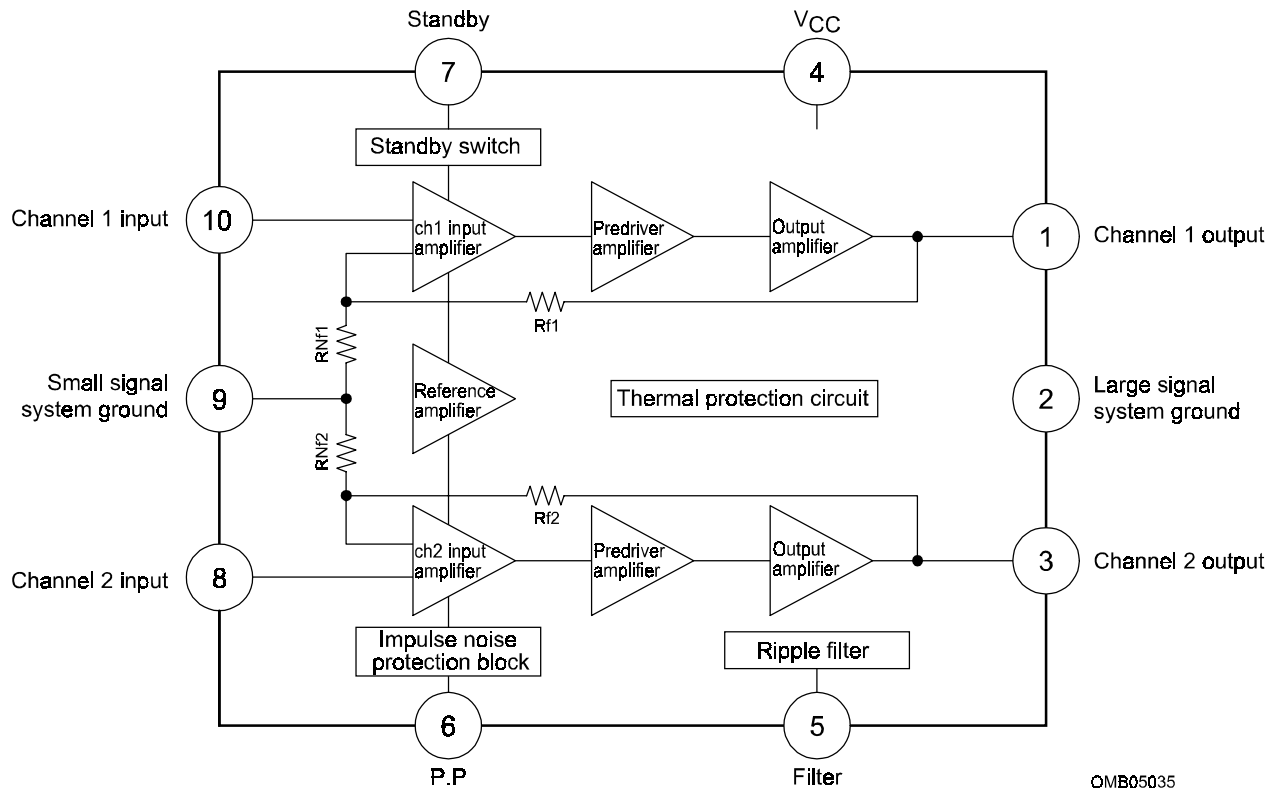
## Package Dimensions

unit : mm

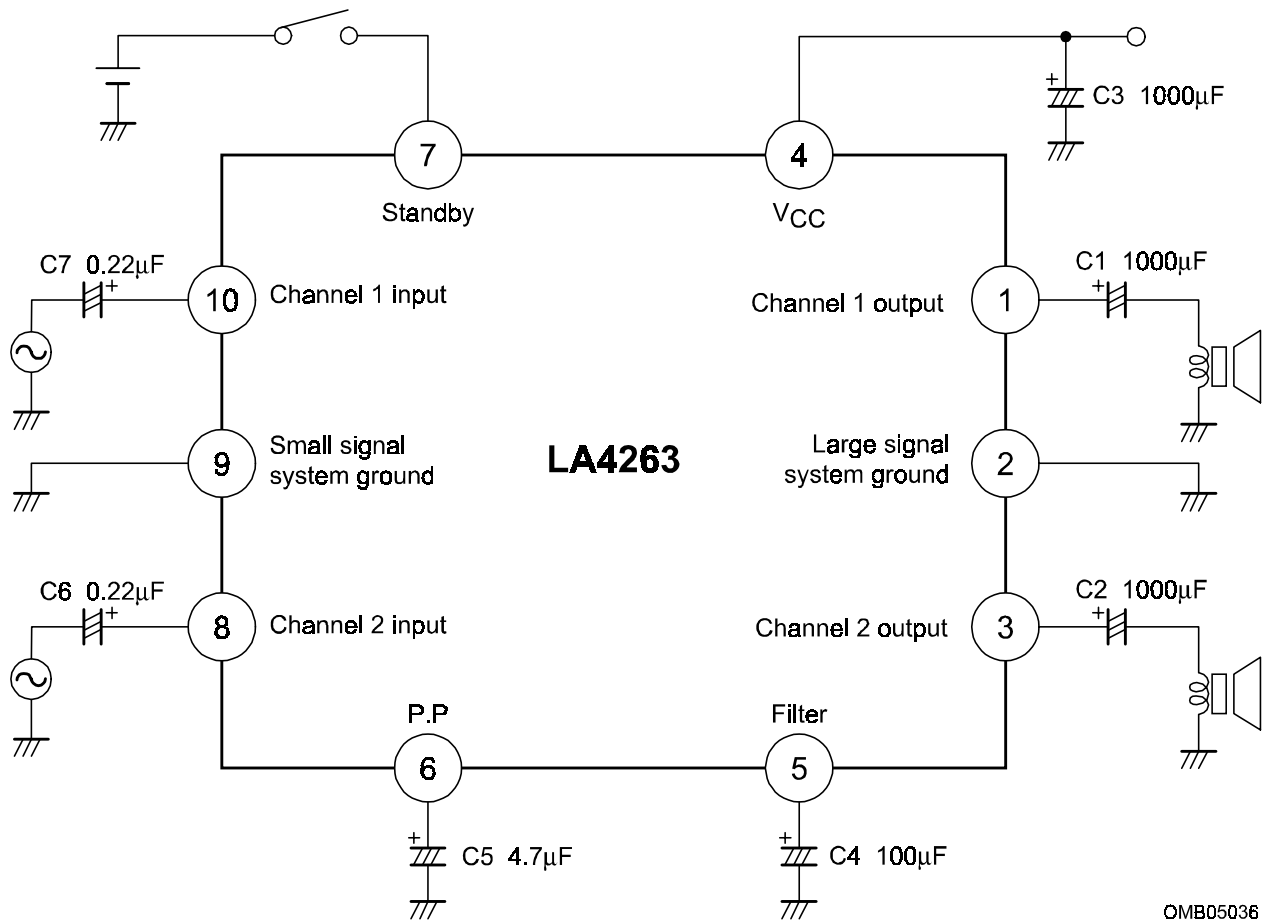
3248B



## Block Diagram



## Application Circuit Example



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