Ordering number : ENA0014

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 Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply rating	V_{CC} max	Rg = 0 (no signal)	24.0	V
Allowable power dissipation	Pd max	With an arbitrarily large heat sink.	15.0	W
Thermal resistance	θj-c		3.0	°C/W
Operating temperature	Topr		-20 to +75	°C
Storage temperature	Tstg		-40 to +150	°C

Operating Conditions at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Recommended operating voltage	V_{CC}		15.0	V
Recommended load resistance	R_L		3	Ω
Operating supply voltage range	V_{CC} op	Within the range such that the package Pd rating is not exceeded.	5.0 to 22	V
Operating load resistance range			2.7 to 8.0	Ω

SANYO Electric Co.,Ltd. Semiconductor Company
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

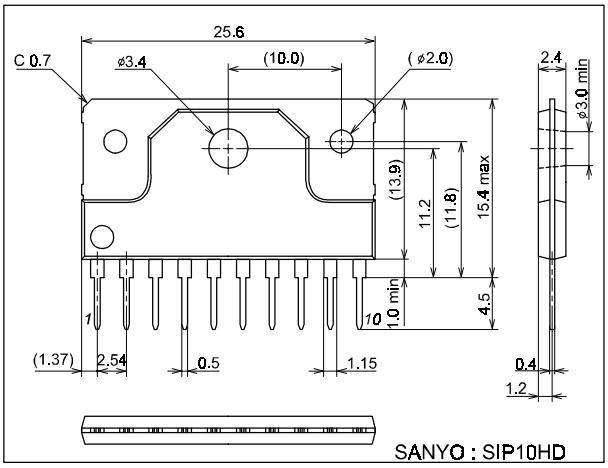
Operating Characteristics at Ta = 25°C, V_{CC} = 15V, R_L = 3Ω, f = 1kHz, Rg = 600Ω, using the specified circuit board and the specified circuit

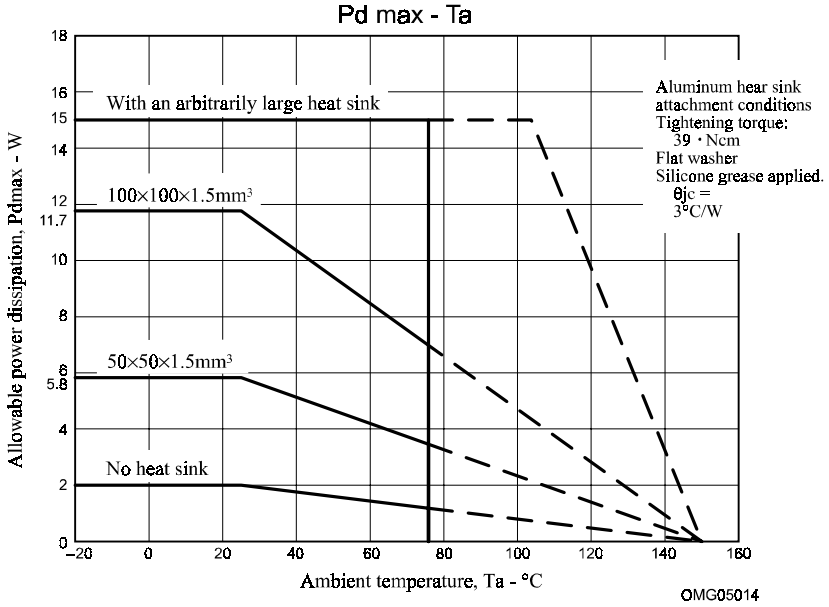
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Standby mode current	Ist	With the standby pin connected to ground → GND		1.0	10	μA
Quiescent current	$I_{CC}O$	Rg = 0	20	30	80	mA
Voltage gain	VG	Vo = 0dBm	33	35	37	dB
Total harmonic distortion	THD	Po = 1.0W		0.15	0.6	%
Output noise voltage	Vno	Rg = 0, BPF = 20Hz to 20KHz		0.05	0.2	mV
Output power	Po1	THD = 10%	6.0	7.0		W
	Po2	V_{CC} = 9V, THD = 10%, R_L = 4Ω	1.5	2.0		W
Channel separation	Ch sep	Vo = 0dBm, Rg = 0, BPF = 20Hz to 20KHz	50	60		dB
Ripple rejection ratio	SVRR	Vr = 0dBm, Rg = 0, fr = 100Hz, BPF = 20Hz to 20KHz	50	60		dB
Standby on voltage	Vst		1.5	5.0		V
Input resistance	Ri		20	30	40	kΩ

Package Dimensions

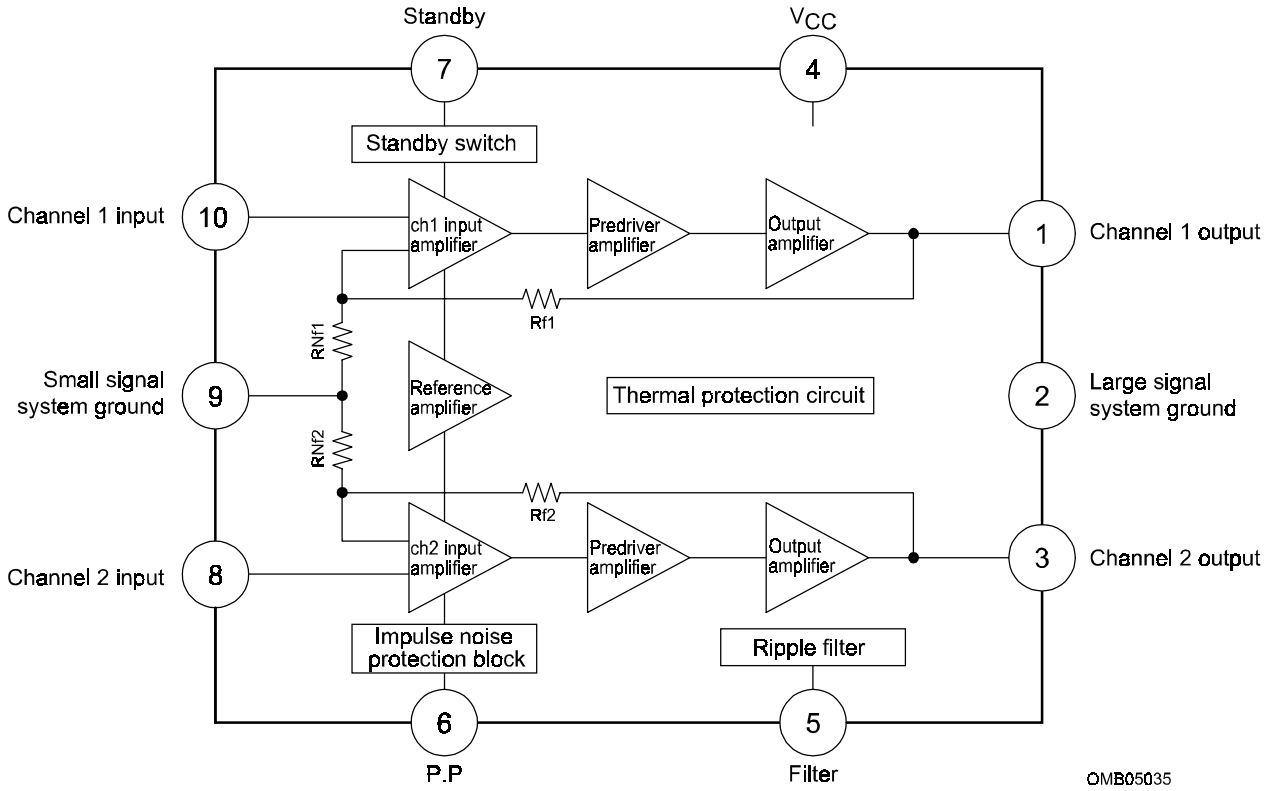
unit : mm

3248B





Block Diagram



Application Circuit Example