

SANYO	No.2251B	LA4280
2-Channel 10W AF Power Amp for Home Stereo, TV Use		

Features

- High-power 2-channel AF power amp
- Low distortion
- Minimum number of external parts required (no bootstrap capacitor required)
- Low pop noise at the time of power switch ON/OFF
- Excellent ripple rejection (58dB typ)
- Wide operating voltage range (10V to 40V)
- External muting available
- On-chip protector against abnormalities (thermal shutdown, overvoltage)

Maximum Ratings at Ta = 25°C

Maximum Supply Voltage	V_{CC} max	Quiescent	45	V	unit
Maximum Output Current	I_o peak		4	A	
Allowable Power Dissipation	P_d max	With heat sink	25	W	
Operating Temperature	T_{opr}		-20 to +75	°C	
Storage Temperature	T_{stg}		-40 to +150	°C	

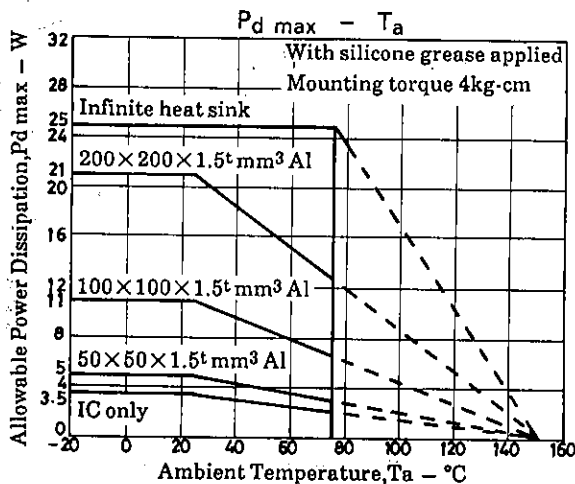
Operating Conditions at Ta = 25°C

Recommended Operating Voltage	V_{CC}		32	V	unit
Recommended Load Resistance	R_L		8	Ω	
Operating Voltage Range	$V_{CC\ op}$		10 to 40	V	

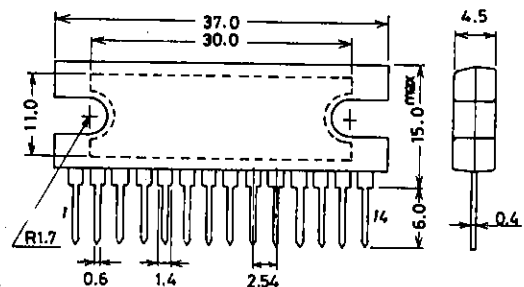
Operating Characteristics at Ta = 25°C, V_{CC} = 32V, R_L = 8Ω, f = 1kHz, R_g = 600Ω,

		See specified Test Circuit.			
Quiescent Current	I_{cco} (1)	Quiescent	30	60	100
	I_{cco} (2)	MT/SW on	30	56	100
Voltage Gain	VG		38	40	42
Voltage Gain Difference	ΔVG				1.5
					dB

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Package Dimensions 3023A-S14HIC (unit: mm)



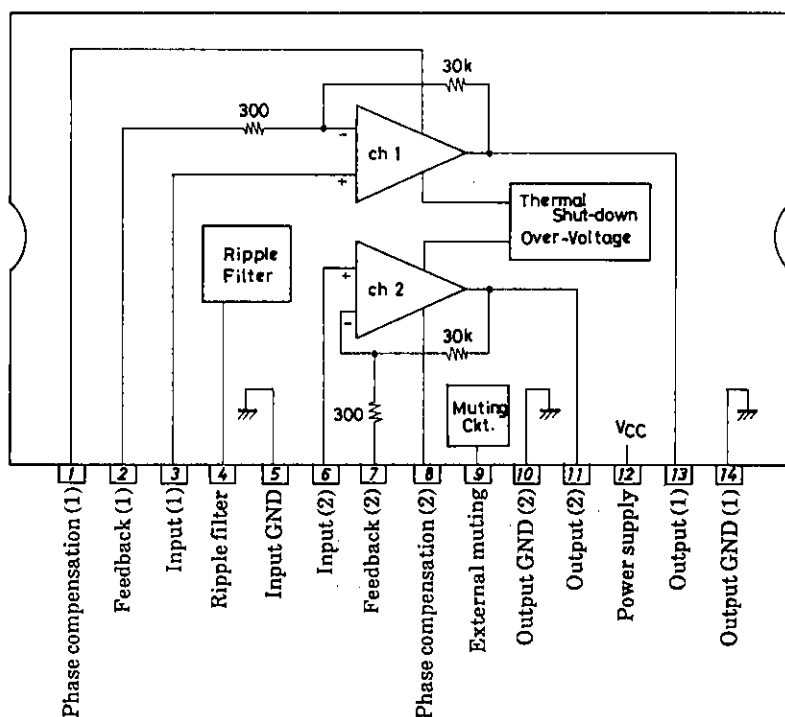
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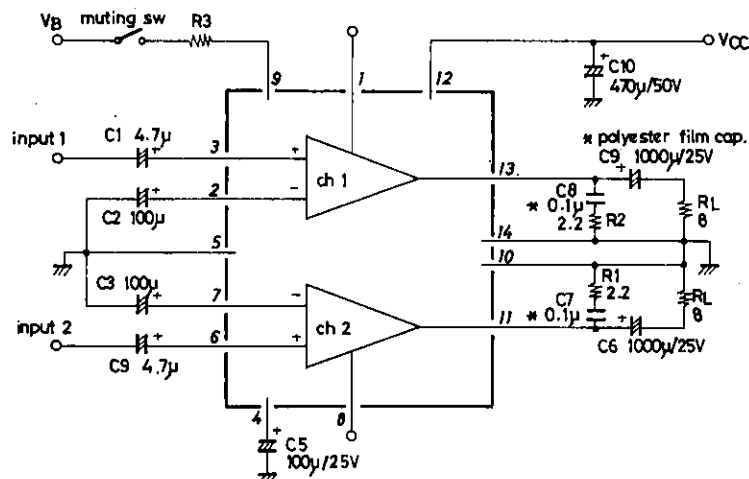
			min	typ	max	unit
Output Power	Po (1)	THD = 1%	9.0	10.0		W
	Po (2)	THD = 3%	10.0	11.5		W
Total Harmonic Distortion	THD	Po = 2W		0.05	0.20	%
Output Noise Voltage	V _{NO}	R _g = 10kΩ, BW = 20Hz to 20kHz		0.25	1.0	mV
Ripple Rejection	SVRR	R _g = 10kΩ, f _R = 100Hz, V _R = 0dBm	45	58		dB
Crosstalk	CT	R _g = 10kΩ	45	60		dB
Muting	V _o (MT)	MT/SW on, V _i = -5dBm			-35	dBm

Equivalent Circuit Block Diagram and Pin Assignment



Unit (resistance: Ω)

Sample Application Circuit



Unit (resistance: Ω, capacitance: F)

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