

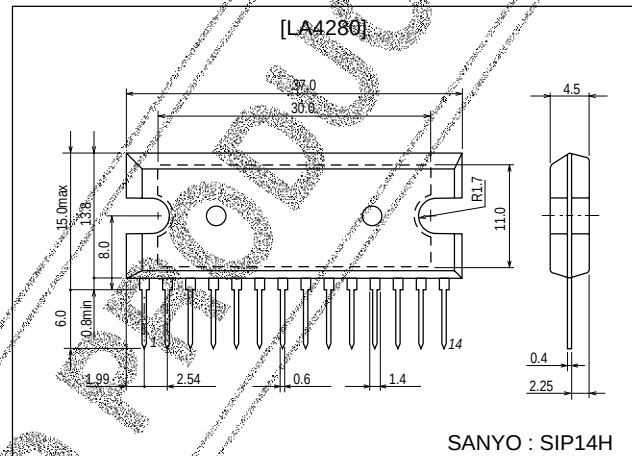
SANYO**LA4280****2-Channel 10W AF Power Amplifier,
for Home Stereo, TV Use****Features**

- High-power 2-channel AF power amplifier.
- 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 shut-down, overvoltage).

Package Dimensions

unit:mm

3023A-SIP14H

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

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	$V_{CC\max}$	Quiescent	45	V
Maximum output current	$I_O\text{peak}$		4	A
Allowable power dissipation	$P_d\max$	With heat sink	25	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}		32	V
Recommended load resistance	R_L		8	Ω
Operating voltage range	$V_{CC\text{op}}$		10 to 40	V

Operating Characteristics at $T_a = 25^\circ\text{C}$, $V_{CC}=32\text{V}$, $R_L=8\Omega$, $f=1\text{kHz}$, $R_g=600\Omega$, See specified test circuit

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Quiescent current	I_{CCQ1}	Quiescent	30	60	100	mA
	I_{CCQ2}	MT/SW on	30	56	100	mA
Voltage gain	VG		38	40	42	dB
Voltage gain difference	ΔVG				1.5	dB
Output power	Po1	THD=1%	9.0	10.0		W
	Po2	THD=3%	10.0	11.5		W

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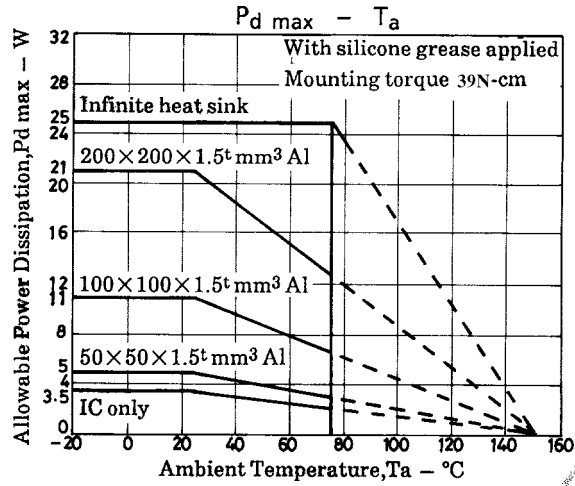
SANYO Electric Co.,Ltd. Semiconductor Company

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

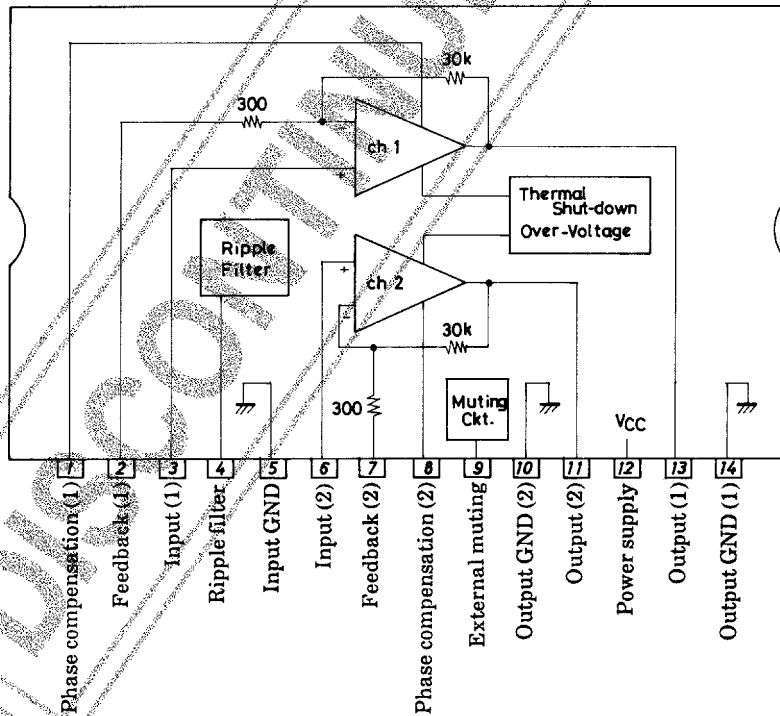
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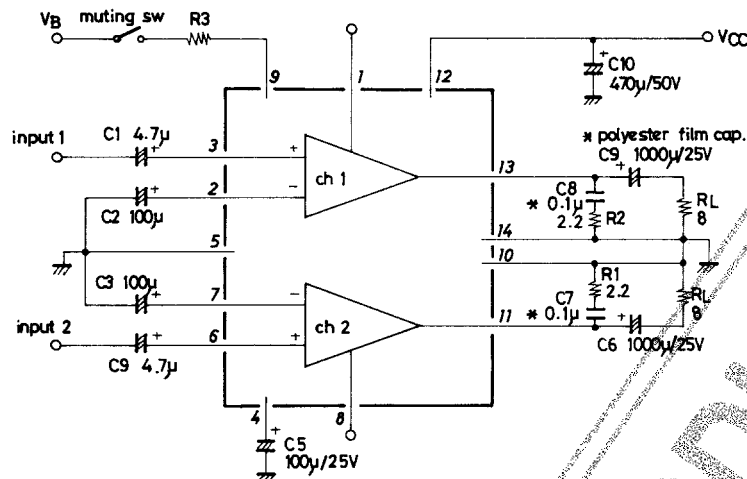
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Total harmonic distortion	THD	$P_O=2W$		0.05	0.20	%
Output noise voltage	V_{NO}	$R_g=10k\Omega$, BW=20Hz to 20kHz		0.25	1.0	mV
Ripple rejection	SVRR	$R_g=10k\Omega$, $f_R=100Hz$, $V_R=0dBm$	45	58		dB
Crosstalk	CT	$R_g=10k\Omega$	45	60		dB
Muting	V_O (MT)	MT/SW on, $V_i=-5dBm$			-35	dBm



Equivalent Circuit Block Diagram and Pin Assignment



Sample Applicatin Circuit

Unit (resistance: Ω , capacitance: F)

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