

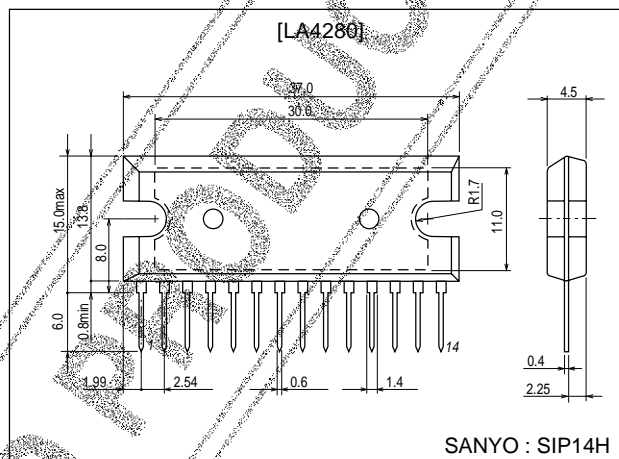
**SANYO****LA4280****2-Channel 10W AF Power Amplifier,  
for Home Stereo, TV Use****Features**

- 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	$V_{CC\text{max}}$	Quiescent	45	V
Maximum output current	$I_{O\text{peak}}$		4	A
Allowable power dissipation	$P_{d\text{max}}$	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	$\Omega$
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	$V_G$		38	40	42	dB
Voltage gain difference	$\Delta V_G$				1.5	dB
Output power	$P_{o1}$	THD=1%	9.0	10.0		W
	$P_{o2}$	THD=3%	10.0	11.5		W

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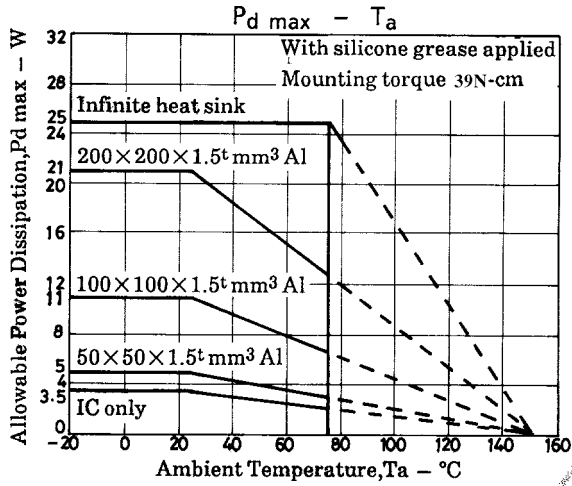
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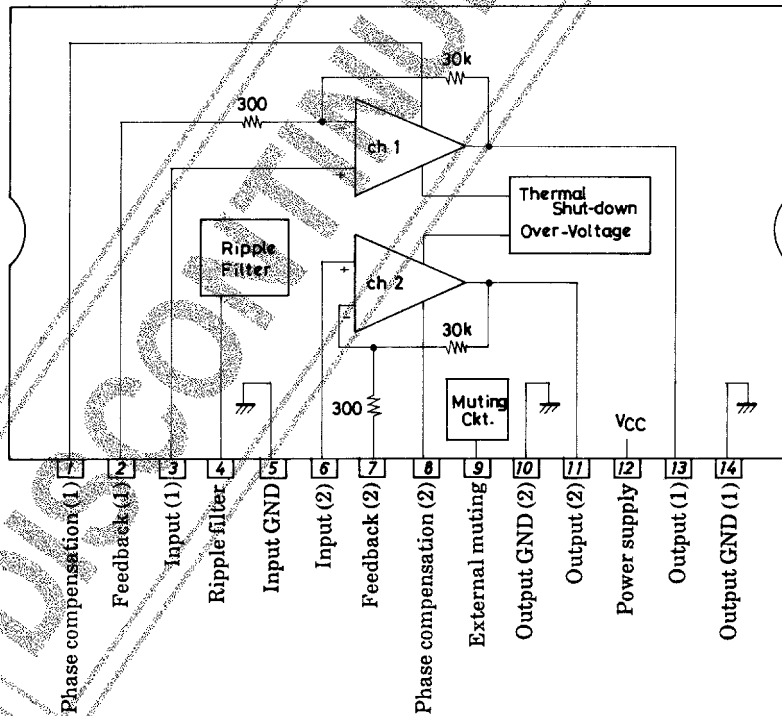
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Total harmonic distortion	THD	$P_O=2W$		0.05	0.20	%
Output noise voltage	$V_{NO}$	$R_g=10k\Omega$ , BW=20Hz to 20kHz		0.25	1.0	mV
Ripple rejection	SVRR	$R_g=10k\Omega$ , $f_R=100Hz$ , $V_R=0dBm$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

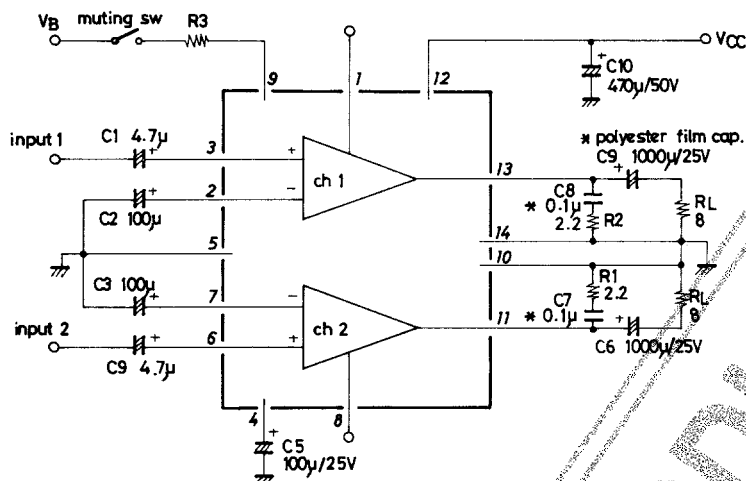


## Equivalent Circuit Block Diagram and Pin Assignment



Unit (resistance:  $\Omega$ )

## Sample Application Circuit



Unit (resistance:  $\Omega$ , capacitance: F)

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