

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

			unit
Maximum Supply Voltage	$V_{CC}$ max	Quiescent	45 V
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 $^\circ\text{C}$
Storage Temperature	$T_{stg}$		-40 to +150 $^\circ\text{C}$

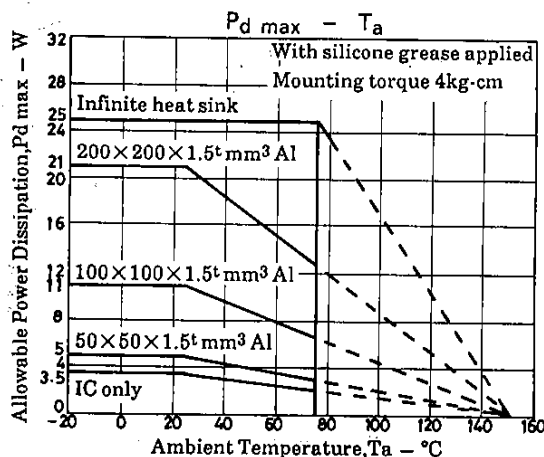
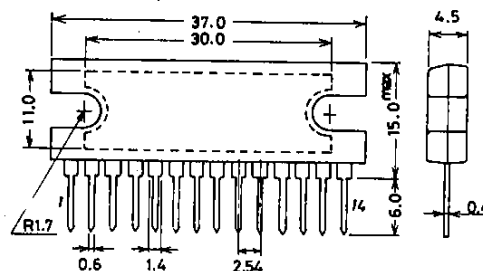
**Operating Conditions at  $T_a = 25^\circ\text{C}$** 

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

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

			min	typ	max	unit
Quiescent Current	See specified Test Circuit.					
	$I_{cc}(1)$	Quiescent	30	60	100	mA
	$I_{cc}(2)$	MT/SW on	30	56	100	mA
Voltage Gain	$V_G$		38	40	42	dB
Voltage Gain Difference	$\Delta V_G$				1.5	dB

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**Package Dimensions 3023A-S14HIC**  
(unit: mm)

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

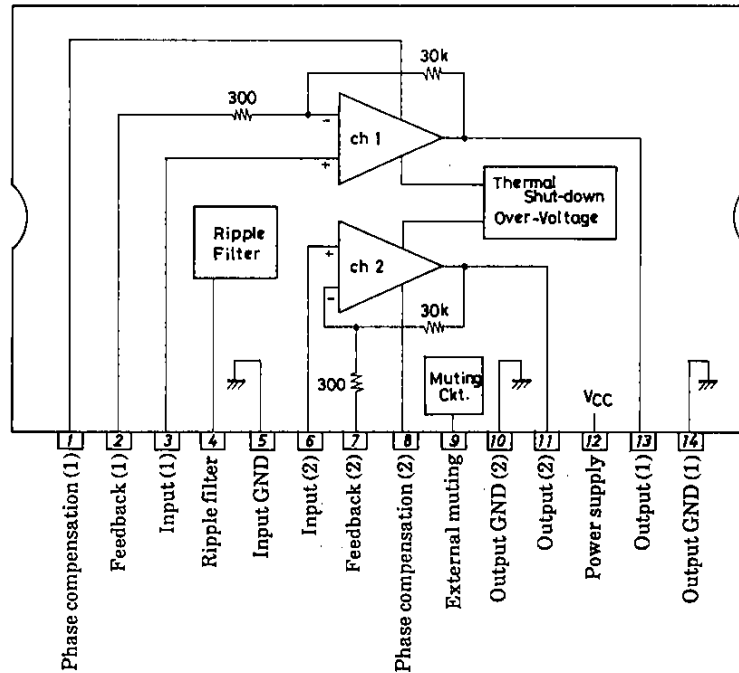
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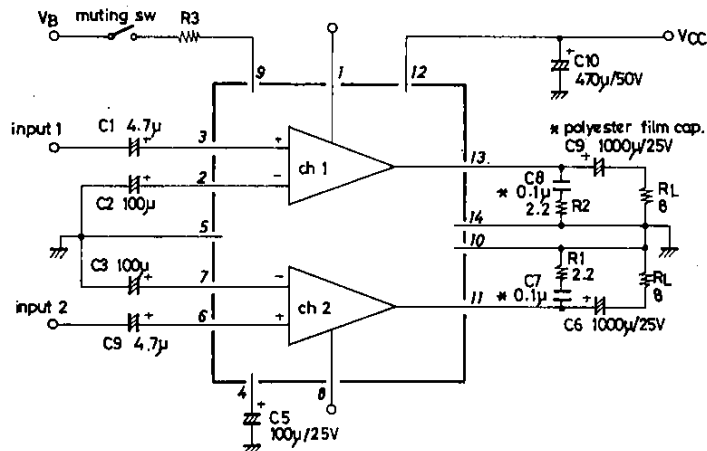
			min	typ	max	unit
Output Power	Po (1)	THD=1%	9.0	10.0		W
	Po (2)	THD=3%	10.0	11.5		W
Total Harmonic Distortion	THD	Po=2W		0.05	0.20	%
Output Noise Voltage	V <sub>NO</sub>	R <sub>g</sub> =10k $\Omega$ , BW=20Hz to 20kHz		0.25	1.0	mV
Ripple Rejection	SVRR	R <sub>g</sub> =10k $\Omega$ , f <sub>R</sub> =100Hz,	45	58		dB
		V <sub>R</sub> =0dBm				
Crosstalk	CT	R <sub>g</sub> =10k $\Omega$	45	60		dB
Muting	Vo (MT)	MT/SW on, Vi=-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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