

<b>SANYO</b>	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	

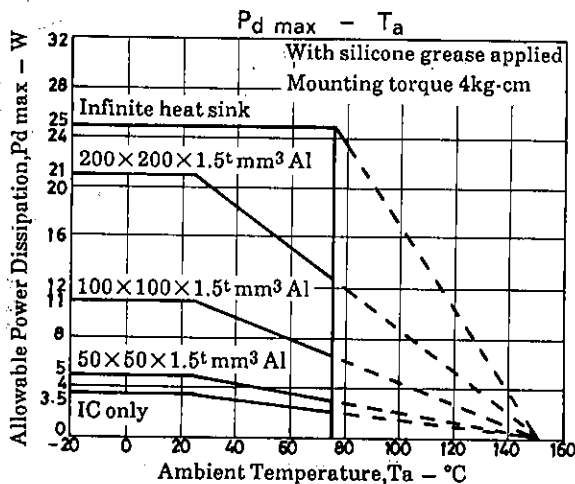
**Operating Conditions at Ta = 25°C**

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	

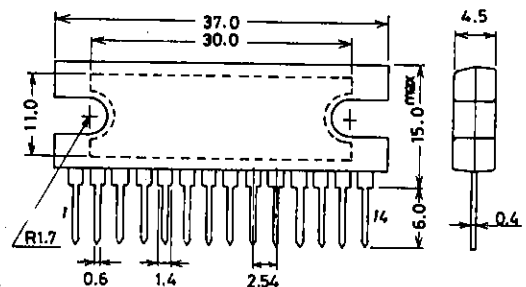
**Operating Characteristics at Ta = 25°C, V<sub>CC</sub> = 32V, R<sub>L</sub> = 8Ω, f = 1kHz, R<sub>g</sub> = 600Ω,**

	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

Continued on next page.



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



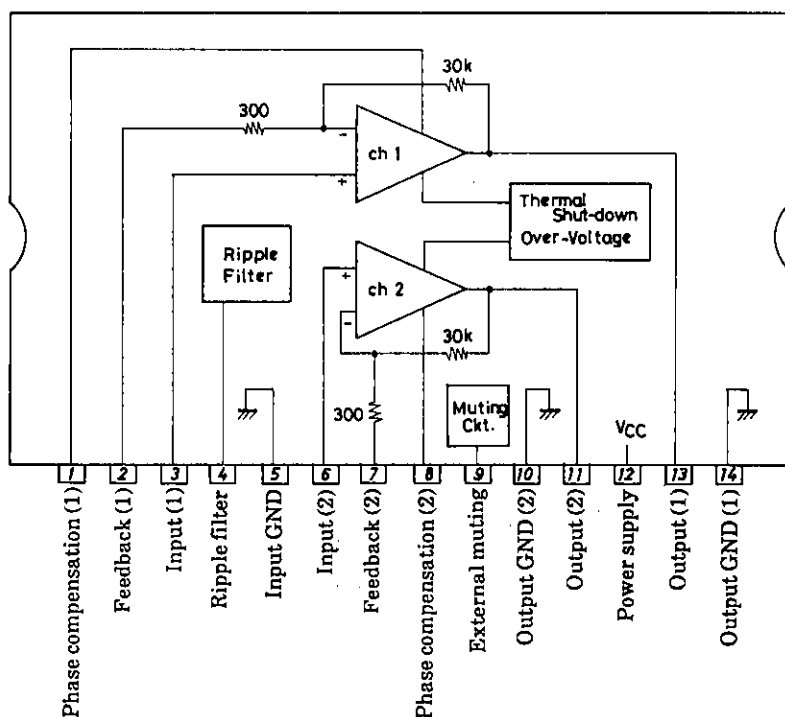
SANYO: SEP14H

# LA4280

Continued from preceding page.

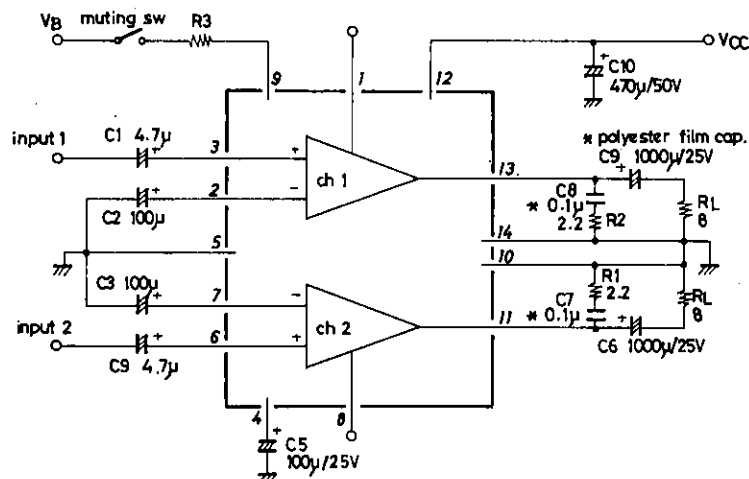
			min	typ	max	unit
Output Power	Po (1)	THD = 1%	9.0	10.0		W
	Po (2)	THD = 3%	10.0	11.5		W
Total Harmonic Distortion	THD	Po = 2W		0.05	0.20	%
Output Noise Voltage	V <sub>NO</sub>	R <sub>g</sub> = 10kΩ, BW = 20Hz to 20kHz		0.25	1.0	mV
Ripple Rejection	SVRR	R <sub>g</sub> = 10kΩ, f <sub>R</sub> = 100Hz, V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

## Equivalent Circuit Block Diagram and Pin Assignment



Unit (resistance: Ω)

## Sample Application Circuit



Unit (resistance: Ω, capacitance: F)

- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
  - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use;
  - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.