

SANYO

No.2664

LA4575, 4575M

Monolithic Linear IC

2-Channel Pre + Power 3V Headphone Amp

The LA4575,4575M are single-chip pre+power amp ICs designed for playback-only use in 3V headphone stereo applications.

Features

- 2-channel IC containing preamplifiers and power amplifiers in a single chip
- Power amp load : $R_L = 16\Omega \times 2$, $R_L = 32\Omega \times 2$
- Power amp output requires no coupling capacitor.
- Low distortion of power amp (THD = 0.2% typ, $P_o = 1mW$)
- Low output noise voltage of power amp ($V_{NO} = 16\mu V$ typ, $R_V = 0$, DIN Audio)
- The output coupling capacitor of the preamp may be removed.

Maximum Ratings at $T_a = 25^\circ C$

			unit
Maximum Supply Voltage	V_{CC} max	6.0	V
Allowable Power Dissipation	P_d max	500	mW
Operating Temperature	T_{opg}	-20 to +75	$^\circ C$
Storage Temperature	T_{stg}	-40 to +125	$^\circ C$

Operating Conditions at $T_a = 25^\circ C$

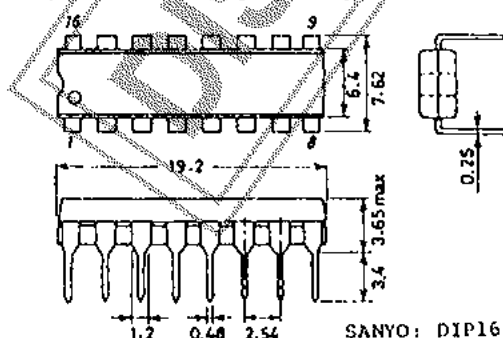
			unit
Recommended Supply Voltage	V_{CC}	3	V
Operating Voltage Range	V_{CCop}	1.8 to 5.4	V
Load Resistance	R_L	16 to 32	Ω

Operating Characteristics at $T_a = 25^\circ C$, $V_{CC} = 3.0V$, $f = 1kHz$, $R_V = 30k\Omega$, $R_L = 32\Omega$

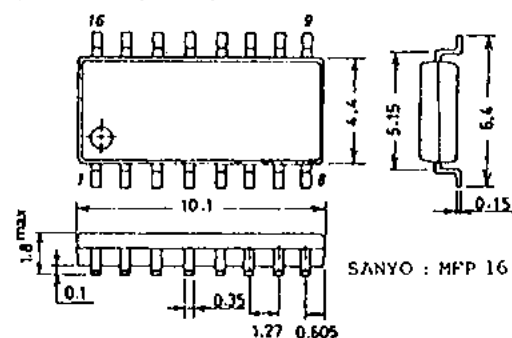
[Pre + Power Amp]				min	typ	max	unit
Quiescent Current	I_{cco}	$R_g = 2.2k\Omega$ (preamp), $R_V = 0$ (power amp)		6	9	18	mA
Crosstalk between Channels	CTI	$R_g = 2.2k\Omega$ (preamp), $R_V = 0$ (power amp)		29	35		dB
[Preamp]							
Voltage Gain (Open Loop)	V_{Go}			75	85		dB
Voltage Gain (Closed Loop)	V_{G1}	$V_o = -20dBm$, $R_L = 30k\Omega$		36.5	38	39.5	dB
Maximum Output Voltage	V_o max	THD = 1%		0.1	0.2		V
Total Harmonic Distortion	THD1	$V_o = 0.15V$			0.04	0.3	%

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Case Outline 3006B - D161C
(unit: mm) [LA4575]



Case Outline 3035A - M161C
(unit: mm) [LA4575M]

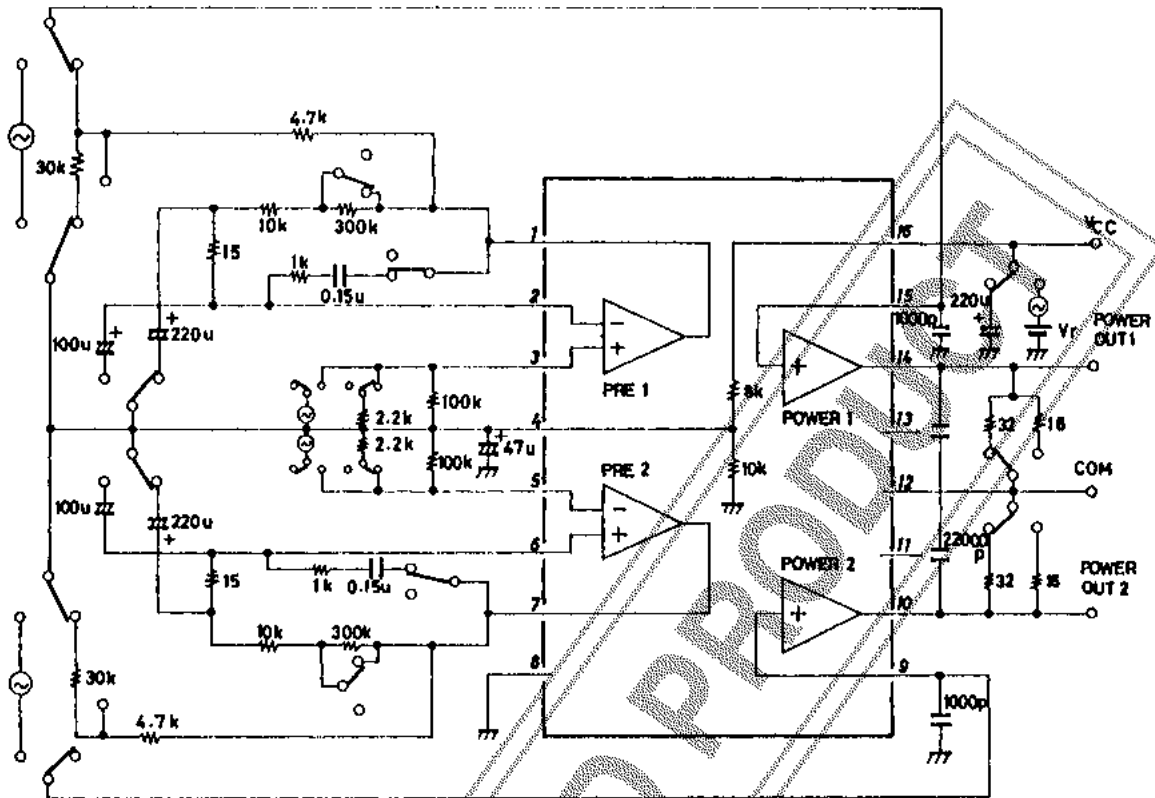


Specifications and information herein are subject to change without notice.

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Test Circuit



The application circuit diagrams and circuit constants herein are included as an example and provide no guarantee for designing equipment to be mass-produced.
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