

**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  $T_a = 25^\circ C$** 

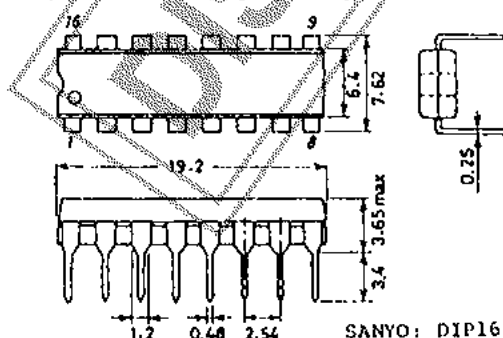
			unit
Recommended Supply Voltage	$V_{CC}$	3	V
Operating Voltage Range	$V_{CCop}$	1.8 to 5.4	V
Load Resistance	$R_L$	16 to 32	$\Omega$

**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	%

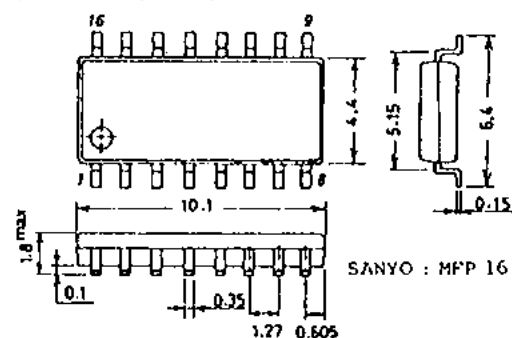
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Case Outline 3006B - D161C  
(unit: mm) [LA4575]



SANYO: DIP16

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



SANYO: MFP 16

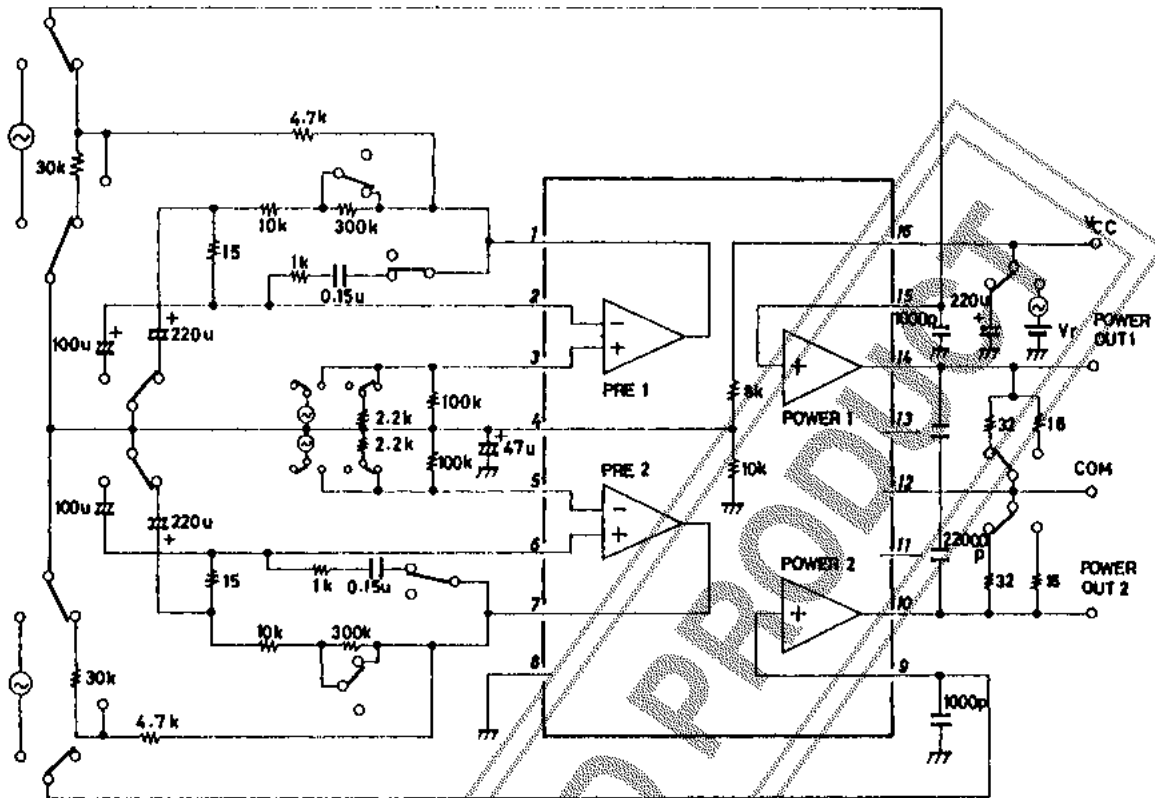
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**SANYO Electric Co., Ltd. Semiconductor Overseas Marketing Div.**  
15-13, 6 chome, Sotokanda, Chiyoda-ku, TOKYO 101 JAPAN

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Test Circuit



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DISCONTINUED PRODUCT