

**SANYO**

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  $T_a = 25^\circ C$**

Maximum Supply Voltage	$V_{CC}$ max	6.0	unit
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  $T_a = 25^\circ C$**

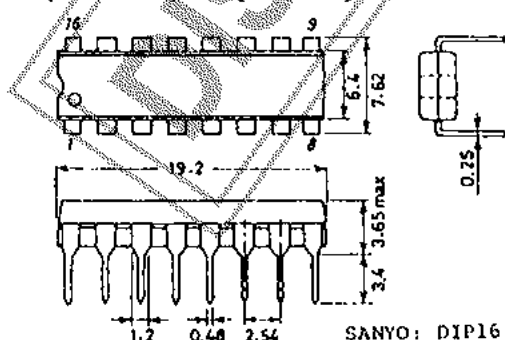
Recommended Supply Voltage	$V_{CC}$	3	unit
Operating Voltage Range	$V_{CCop}$	1.8 to 5.4	V
Load Resistance	$R_L$	16 to 32	$\Omega$

**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	%

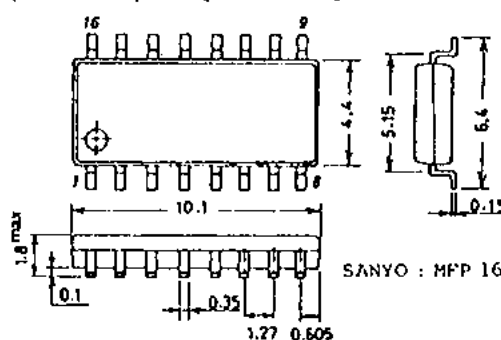
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Case Outline 3006B - D161C  
(unit: mm) [LA4575]



SANYO: DIP16

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

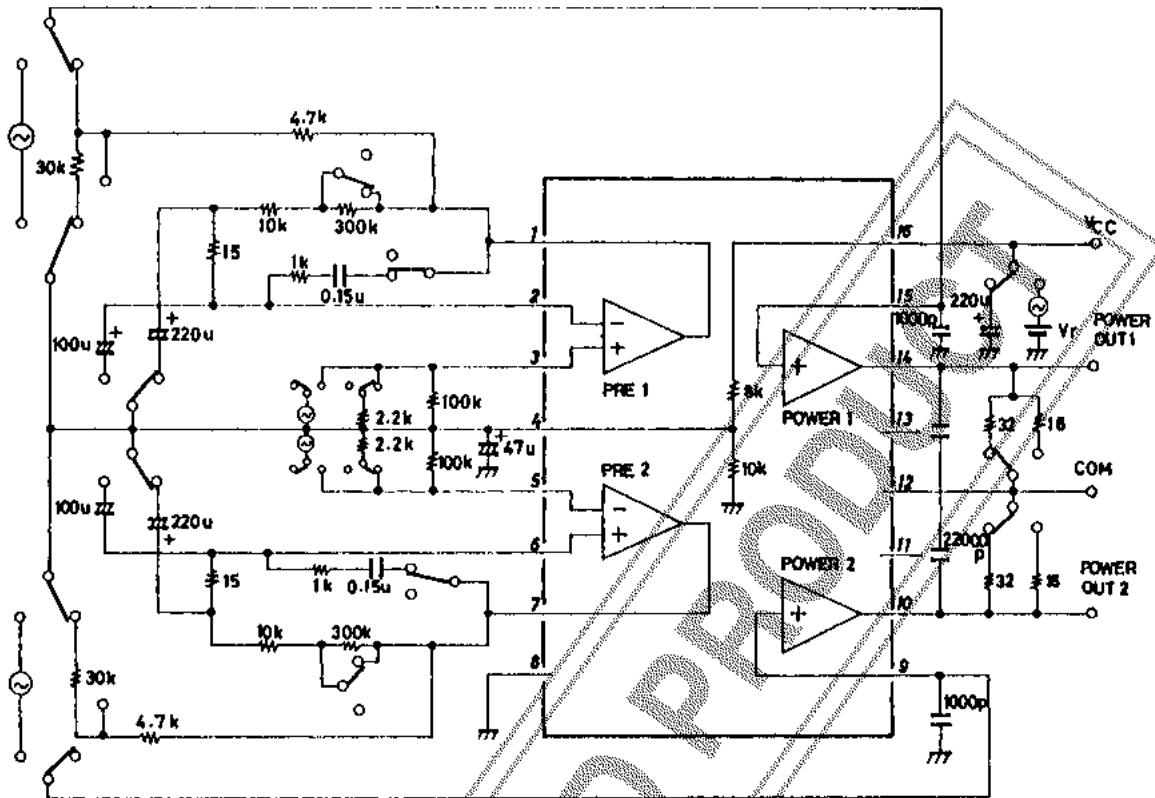


SANYO: MFP 16

Specifications and information herein are subject to change without notice.



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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DISCONTINUED PRODUCT