

LINEAR INTEGRATED CIRCUITS DATA

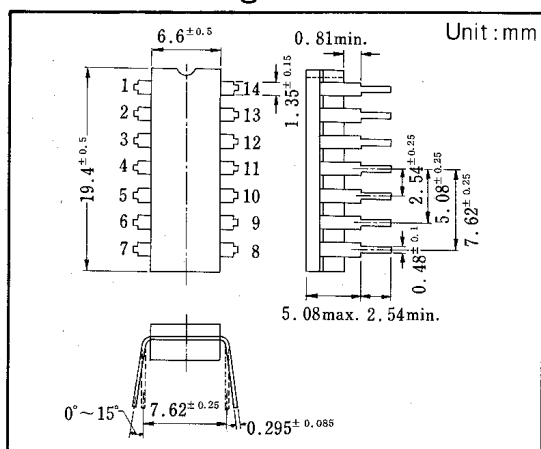
AN264

DUAL LOW NOISE PREAMPLIFIER

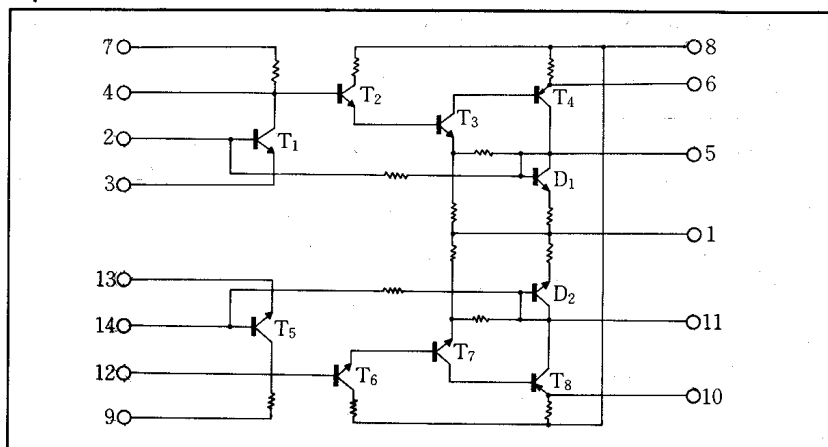
The AN264 is a monolithic high gain dual preamplifier designed for use as an equalizer amplifier, a tone control amplifier or general audio preamplifier in stereos and 8-track auto-stereos.

The device offers stable operating characteristics over a wide range of supply voltages. Its emitter-follower-coupled output circuit permits easier peripheral circuit designs. The device is hermetically sealed in a reliable ceramic package.

Outline Drawing



Equivalent Circuit



Quick Reference Data

Item	Symbol	Value	Unit
Supply Voltage	V_{CC}	9 ~ 20	V
Voltage Gain (Open Loop)	G_v	70	dB
Total Harmonic Distortion	D_{tot}	0.03	%
Input Impedance	Z_{IN}	100	K Ω
Input Converted Noise Voltage	V_{NI}	1.9	μF

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Item	Symbol	Rating	Unit
Operating Ambient Temperature Range	T_{opr}	$-20 \sim +75$	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	$-65 \sim +150$	$^\circ\text{C}$
Supply Voltage	V_{cc}	24	V
Total Current Consumption	I_{tot}	16	mA
Total Power Dissipation	P_T	400	mW

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Item	Symbol	Test Circuit	Conditions	Limits			Unit
				Min.	Typ.	Max.	
Voltage Gain (Open Loop)	$G_v(\text{open})$	1	$V_{cc}=18\text{V}$ $f=1\text{kHz}$, $V_o=1\text{Vrms}$	65	70		dB
Total Harmonic Distortion	D_{tot}	2	$V_{cc}=18\text{V}$, $G_v=34\text{dB}$ $f=1\text{kHz}$, $V_o=1\text{Vrms}$		0.03	0.1	%
Output Voltage	V_o	2	$V_{cc}=18\text{V}$, $G_v=34\text{dB}$ $f=1\text{kHz}$, $D_{tot}=1\%$	3			Vrms
Noise Level	V_N	3	$V_{cc}=18\text{V}$, $R_s=2.2\text{k}\Omega$ $BW=30\text{Hz} \sim 65\text{kHz}$, $G_v=76\text{dB}$		12	18	mVrms
Total Current Consumption	I_{tot}	4	$V_{cc}=18\text{V}$	3		13	mA
Input Impedance	Z_{IN}		$V_{cc}=18\text{V}$, $G_v=34\text{dB}$ $f=1\text{kHz}$	50	100		$\text{k}\Omega$

 $P_T - T_a$ 