National Semiconductor

Semiconductors

Linear I.C.'s - Consumer Circuits

LM378 Dual 4 Watt Audio Amplifier

GENERAL DESCRIPTION

The LM378 is a monolithic dual power amplifier which offers high quality performance for stereo phonographs, tape players, recorders, and AM-FM stereo receivers, etc.

The LM378 will deliver 4W channel into 8 or 16Ω loads loads. The amplifier is designed to operate with a minimum of external components and contains an internal bias regulator to bias each amplifier. Device overload protection consists of both internal current limit and thermal shutdown.

FEATURES

Avo typical 90 dB
4W per channel
70 dB ripple rejection
75 dB channel separation
Internal stabilization
Self centered biasing
3 MO input impedance
Internal current limiting
Internal thermal protection

ABSOLUTE MAXIMUM RATINGS

Supply voltage	35V
Input voltage	OV-V supply
Operating temperature	0°C to +70°C
Storage temperature	-65°C to +150°C
Junction temperature	150°C
Lead Temperature	300°C

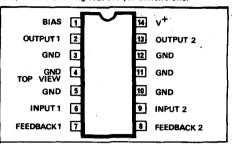
REFERENCE TABLE

Code	Stock No.
- LM378N	34964X

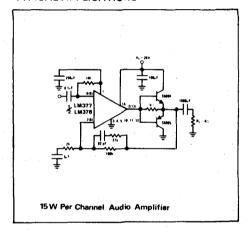
Also Available From I.T.T. Electronic Services The LM383 5 Watt Audio Amplifier Full Data Available on request

CONNECTION DIAGRAM

See outline drawing No. 109 for dimensions.



TYPICAL APPLICATIONS



APPLICATIONS

Multi-channel audio systems
Tape recorders and players
Movie projectors
Automotive systems
Stereo phonographs
Bridge output stages
AM-FM radio receivers
intercoms
Servo amplifiers
Instrument systems