## Witness S

# LM733 Series Differential Video Amplifier

#### REFERENCE TABLE

Code	Stock No.
LM733H	31133E
LM733CH	31134C
LM733CN	31135A

#### GENERAL DESCRIPTION

The LM733/LM733C is a two-stage, differential input, differential output, wide-band video amplifier. The use of internal series-shunt feedback gives wide bandwidth with low phase distortion and high gain stability. Emitter-follower outputs provide a high current drive, low impedance capability. Its 120 MHz bandwidth and selectable gains of 10, 100, and 400, without need for frequency compensation, make it a very useful circuit for memory element drivers, pulse amplifiers, and wide-band linear gain stages.

#### **FEATURES**

120 MHz bandwidth

250kΩ input resistance

Selectable gains of 10, 100, 400

No frequency compensation

High common mode rejection ratio at high frequencies

#### **APPLICATIONS**

Magnetic tape systems

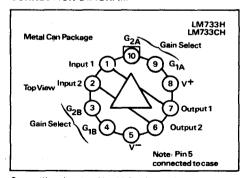
Disk file memories

Thin and thick film memories

Woven and plated wire memories

Wide-band video amplifiers

#### CONNECTION DIAGRAM

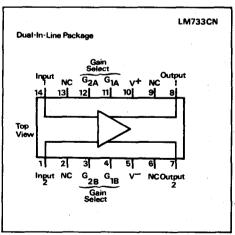


See outline drawing No. 98 for dimensions.

#### ABSOLUTE MAXIMUM RATINGS

Differential input voltage	±5V
Common mode input voltage	±6V
V <sub>cc</sub>	±8V
Output current	10mA
Power dissipation (Note 1)	500mW
Junction temperature	+150°C
Storage temperature range	-65°C to +150°C
Operating temperature range LM733C, LM733	−55°C to +125°C 0°C to +70°C
Lead temperature (Soldering, 10 sec)	300°C

### CONNECTION DIAGRAM



See outline drawing No. 109 for dimensions.