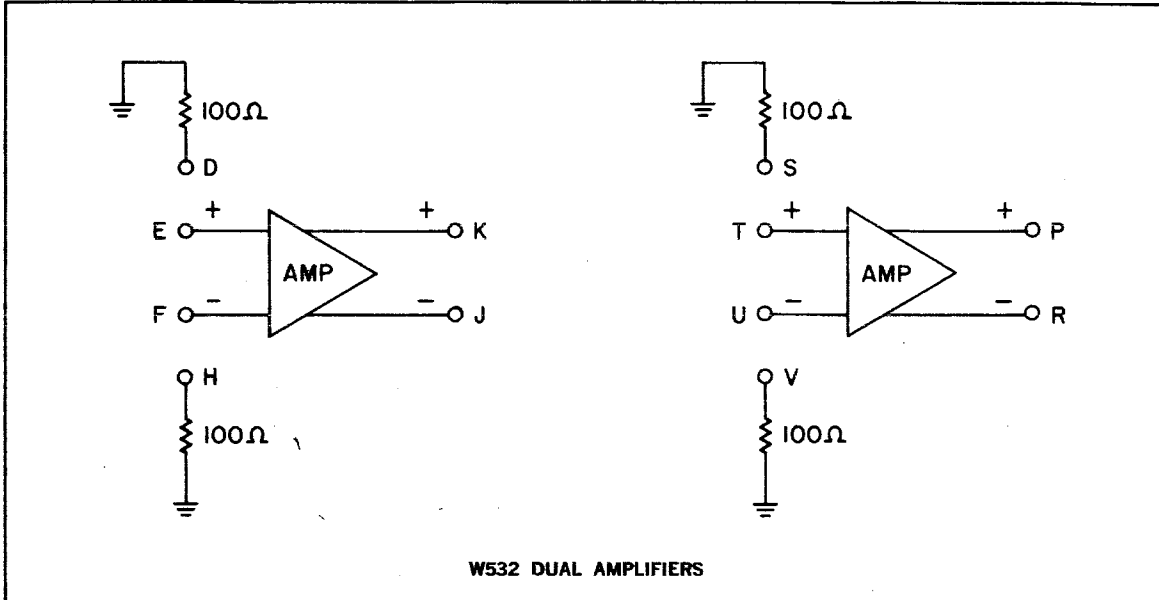


# DUAL AC-COUPLED DIFFERENCE AMPLIFIERS TYPE W532

**W  
SERIES**



The W532 contains two AC-coupled differential amplifiers for use with many magnetic sense systems, including the H201 core memory. These amplifiers provide the high differential gain and common mode noise rejection necessary to amplify information signals in a system using a single sense line per plane for a memory or per channel for a tape system.

**INPUTS:** Pins E, F, T, U require an input current of 0.15 ma or less and must be terminated to ground through the internal 100Ω resistor or an external resistor or transformer of nominal impedance 1000Ω or less. These terminations bias the inputs at ground. In the absence of common mode signals, the difference signals must not exceed 80 mv for linear amplification. For positive common mode signals the maximum differential input must be reduced by 5mv per half volt of common mode input. Negative common mode voltages allow an increase in maximum differential input by the same ratio. See Table 1 below for additional specifications.

**OUTPUTS:** The output voltage with no input signal is nominally at -11.5 volts so that a W533 can be used

with a W532 to detect differential signals above a preset threshold. Output impedance is 1000Ω. Due to power supply ripple it is recommended that the output be AC-coupled to other modules. See Table 1 for additional specifications.

**TABLE 1. MODULE SPECIFICATIONS**

Specifications	Minimum	Maximum
Output Voltage (no signal)	-11.0	-12.0
Common Mode Input Voltage	-5	+5
Common Mode Voltage Gain	—	0.37
Difference Mode Voltage Gain	88	96
Output Rise Time Square Wave Input	—	250 ns
Output Fall Time Square Wave Input	—	400 ns
3db Bandpass	1 kHz	0.8 MHz

**POWER:** +10(A)/40 ma, -15(B)/40 ma

W532 — \$30.00