ESS10-0-10
ANALOG AMPLIFIER

Description:
The ESS10-0-10 will generate a linear output voltage proportional to the joystick's handle position. The output can be adjusted from 3.5 to 11 volts. The board can be programmed for (4) basic output requirements: 0V to +V, -V to 0V, -V to +V with zero volts at center position, or +V with zero volts at center position (V=3.5 to 11 VDC).

Electrical Specifications:
Supply Voltage: 18-30 VDC
Output Voltage: ±10V
Output Current Max: 10 mA
Output Configurations: 4
Minimum Load: 1k Ohms
Output Adj. Range: 3.5 - 11 VDC
Offset Adj. Range: 0 - +/- 0.1V
LED: Null set-up indicator
Supply Current Max: 100 mA
Effective Oper. Angle: ±126°

Command Signal Options:
3 Wire potentiometer
Center tapped potentiometer with shorting bar for null deadband
Hall effect sensor

Mechanical Specifications:
0.093" Fiberglass PCB with integrated or remote mounted command potentiometer.
Operating Temperature: -25C to +75C
Termination: 4 Pole terminal block
Sealing: Upon request
Potentiometer Life: 2-5 Million revolutions

Command Signal Options:
3 Wire potentiometer
Center tapped potentiometer with shorting bar for null deadband
Hall effect sensor

Output Options:

- **Option A**: No Deadband
  - B: 0V
  - A: +V
  - (-)V

- **Option B**: With Deadband
  - B: 0V
  - A: +V
  - (-)V

- **Option C**: With Deadband
  - B: 0V
  - A: +V
  - (-)V

- **Option D**: With Deadband
  - B: 0V
  - A: +V
  - (-)V

- **Option A1**: With Deadband
  - B: 0V
  - A: +V
  - (-)V

- **Option B1**: With Deadband
  - B: 0V
  - A: +V
  - (-)V

- **Option C1**: With Deadband
  - B: 0V
  - A: +V
  - (-)V

- **Option D1**: With Deadband
  - B: 0V
  - A: +V
  - (-)V

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Pub. # 37.C5