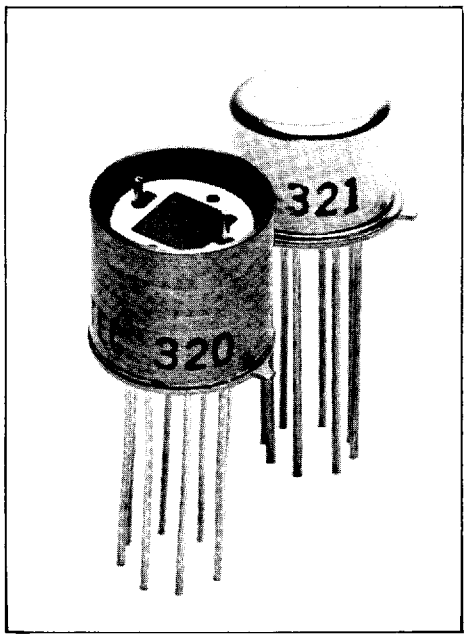
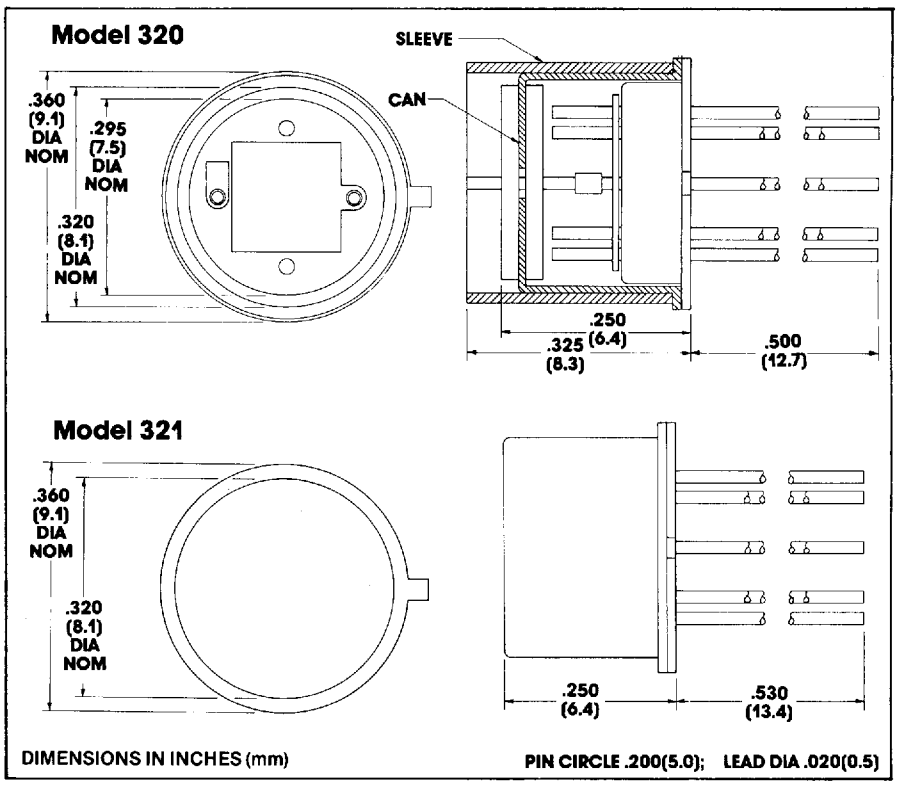


320/321
Impedance Converter with Selectable Load Resistors



Model 320 consists of three high megohm load resistors, one output (source) resistor and a low noise, low capacitance N-Channel JFET sealed into a two-stage, topless TO-99 8-pin transistor housing reinforced with a cylindrical sleeve.

Two leads, input and ground, are extended through both the top of the housing and a ceramic substrate. The thick film pattern deposited on the substrate permits the use of detectors up to 3 mm in diameter. The case is connected to a separate pin, allowing the internal circuit to "float" electrically.

Model 320 is uniquely constructed to allow the installation of detector material and filter window, as well as selection of load resistor-value without interfering with the impedance converter's critical circuit.

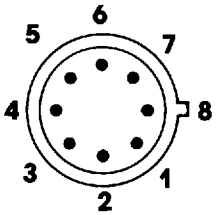
It is designed specifically for the engineering and testing of UV/Vis/IR detectors which require an input stage with high impedance, low capacitance and low noise.

Model 321 is a single-stage impedance converter with the same basic internal construction of the Model 320 except that it is hermetically sealed by welding the can to the header. All pins have glass-to-metal seals.

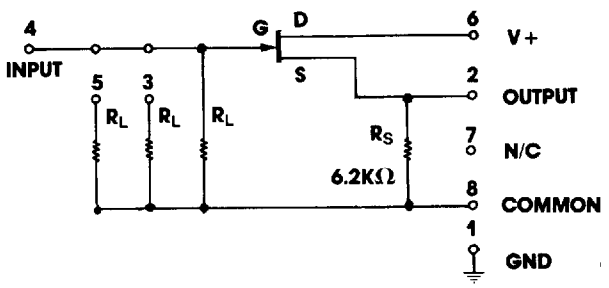
SPECIFICATIONS

Output Impedance:	20 KΩ
Input Capacitance:	3 pF typ.
Gain:	0.6 min.
Voltage Noise: (@RT, 10 Hz, 1 HZ BW)	30 nV/ $\sqrt{HZ}$ typ.
Current Noise: (@RT, 10 Hz, 1 Hz BW)	5×10^{-16} A/ $\sqrt{HZ}$ typ.
Supply Voltage:	5 – 15 VDC =
Supply Current:	0.1 mA typ.
Power Consumption:	2.5 mW max.

PIN CONNECTIONS



1. GND
2. OUTPUT
3. $5X10^{10}\Omega$
4. $5X10^{11}\Omega$
5. $5X10^{9}$
6. V+
7. N/C
8. COM



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