**Physical Properties**

Thickness  0.208 mm (0.008 in.)  
Length     56.8 mm (2.24 in.)    
Width      31.8 mm (1.25 in.)   
Sensing Area 25.4 mm (1 in.) diameter  
Connector  2-pin Male Square Pin  
Substrate Polyester (ex: Mylar)  
Pin Spacing 2.54 mm (0.1 in.)

**Standard Force Ranges (as tested with circuit shown below)**

**Force Range:**
0 - 25 lb. (110 N)

**Force Range Adjustments**

Measurement ranges of 0-1 lb and 0-7000 lb are achievable with the A401 sensor by utilizing the recommended circuitry. The force range can be extended by reducing the drive voltage, $V_T$, or the resistance value of the feedback resistor, $R_F$. Conversely, the sensitivity can be increased for measurement of lower forces by increasing $V_T$ or $R_F$.

**Typical Performance**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linearity (Error)</td>
<td>&lt; ±3%</td>
</tr>
<tr>
<td>Repeatability</td>
<td>&lt; ±2.5% of full scale</td>
</tr>
<tr>
<td>Hysteresis</td>
<td>&lt; 4.5 % of full scale</td>
</tr>
<tr>
<td>Drift</td>
<td>&lt; 5% per logarithmic time scale</td>
</tr>
<tr>
<td>Response Time</td>
<td>&lt; 5 mSec</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>15°F - 140°F (-9°C - 60°C)*</td>
</tr>
</tbody>
</table>

*Force reading change per degree of temperature change = ±0.2%/°F (0.36%/°C)
*For loads less than 10 lbs., the operating temperature can be increased to 165°F (74°C)

**Evaluation Conditions**

Line drawn from 0 to 50% load  
Conditioned sensor, 80% of full force applied  
Conditioned sensor, 80% of full force applied  
Constant load of 25 lb (111 N)  
Impact load, output recorded on oscilloscope  
Time required for the sensor to respond to an input force