

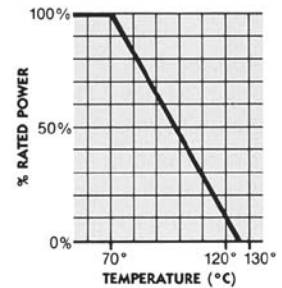
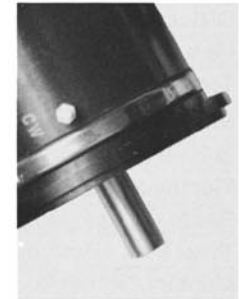


SERVO MOUNT/BALL BEARING  
MODEL 2801

HYBRID SINGLE-TURN  
PRECISION POTENTIOMETERS

| SERVO MODEL  | 2801            |
|--|-----------------|
| <b>ELECTRICAL</b>                                    |                 |
| Theoretical Electrical Travel                        | 358°            |
| Normal Resistance Range                              | 1.5K to 40K     |
| Extended Resistance Range <sup>(1)</sup>             | 750Ω to 50K     |
| Resistance Tolerance: Standard %                     | ± 5             |
| Best Practical %                                     | ± 3             |
| Power Rating At 70°C, Derating To 0 At 125°C (Watts) | 7.0             |
| Linearity, Independent, Tolerance, Standard %        | ± 0.15          |
| Best Practical %                                     | ± 0.07          |
| Output Smoothness Max. (% Of Total Applied Voltage)  | 0.15            |
| End Voltage Max. (% Of Total Applied Voltage)        | 0.25            |
| Insulation Resistance At 500 VDC, Min. (Megohms)     | 1000            |
| Dielectric Withstanding Voltage (Volts RMS)          | 1000            |
| Max. Applied Voltage (Volts DC) <sup>(2)</sup>       | 400             |
| Temperature Coefficient Of Potentiometer, Max. %/°C  | ± .007          |
| <b>MECHANICAL</b>                                    |                 |
| Total Mechanical Travel                              | 360° Continuous |
| Mechanical Life, Shaft Revolutions                   | 10 million      |
| Ganged Cups, Max. (Number)                           | 8               |
| Taps, Max., Excluding End Terminations               | 41              |
| Moment Of Inertia, Per Cup (gm-cm <sup>2</sup> )     | 8.5             |
| Weight: Single Cup (oz.)                             | 6.5             |
| Each Additional Cup (oz.)                            | 1.4             |
| Torque, Max. Per Cup (oz.-in)                        | 1.0             |
| Pilot Diameter Runout, Max.                          | .0015           |
| Lateral Runout, Max.                                 | .003            |
| Shaft Runout, Max.                                   | .001            |
| Shaft Radial Play, Max.                              | .002            |
| Shaft End Play, Max.                                 | .004            |
| Dimension For Each Additional Cup                    | .562 ± .002     |
| <b>ENVIRONMENTAL</b>                                 |                 |
| Temperature Range (°C) Standard                      | - 55 to + 125   |

- (1) All specifications listed apply to units with a total resistance within the normal resistance range. Higher or lower resistances may require some degradation of listed specifications because of resistance material composition.
- (2) Not to exceed specified power rating.



ALL MODELS are manufactured to meet or exceed applicable characteristics of MIL-R-39023. For MILITARY-APPROVED (QPL) Listings, see page 52.

**TOLERANCES UNLESS OTHERWISE SPECIFIED:**

FRACTIONAL: ± 1/64" DECIMAL: ± .005" ANGULAR: ± 1°

