



■轴的尺寸和轴端可按用户要求供货
Bespoke shaft dimension and shape available upon request

POD20 型精密单圈线绕电位器 POD20 Precision, single turn, wirewound potentiometer

■ 适用标准 Applicable Specifications

- GB/T15298-94 电子设备用电位器 第一部分: 总规范
- Q/RU804-2001 POD20 型单圈精密线绕电位器详细规范

■ 电特性 Electrical Characteristics

- 标称阻值范围 Range of rated resistance (Ω): 50~20K
- 阻值允许偏差 Resistance tolerance: $\pm 5\%$
- 线性精度 Linearity: $\pm 0.4\%$
- 终端电阻 Terminal resistance: $\leq 0.5\%R$ 或 2Ω , 取较大者
 $\leq 0.5\%R$ or 2Ω , Whichever greater
- 转动噪声 Rotational noise (Ω): ≤ 100
- 耐电压 Dielectric withstand voltage: $450V_{AC}$
(正常大气压 Atmospheric pressure)
- 电阻体极限电压 Limiting Element Voltage(V): 300
- 有效电行程 effective electrical travel: $318^\circ \pm 10^\circ$
- 总机械行程 total mechanical travel: $320^\circ \pm 10^\circ$

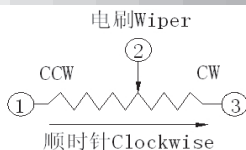
■ 环境特性 Environmental Characteristics

- 额定功率 Rated Power ($300U_{max}$)
 $2W@70^\circ C, 0W@125^\circ C$
- 温度范围 Temperature range($^\circ C$): $-55 \sim +125$
- 电阻温度系数 TCR: $\leq \pm 100 \times 10^{-6} / ^\circ C$
- 稳态湿热 Damp heat, steady heat:
GB/T15298-94, 4.39 item
 $\Delta R \leq \pm (2\%R \pm 0.1\Omega), R_1 \geq 100M\Omega$
- 振动 Vibration: GB/T15298-94, 4.35 item
 $\Delta R \leq \pm (0.5\%R \pm 0.05\Omega)$
 $\Delta(U_{ab}/U_{ac}) \leq \pm 1\%$
- 冲击 Shock: GB/T15298-94, 4.35 item
 $\Delta R \leq \pm (0.5\%R + 0.05\Omega)$
- 电气耐久性 Electrical endurance:
 $70^\circ C, 1000h$
 $\Delta R \leq \pm (2\%R \pm 0.1\Omega)$
- 转动噪声 Rotational noise: $\leq 500\Omega$
- 机械耐久性 Mechanical endurance
100000 cycles; $\Delta R \leq \pm (5\%R \pm 0.5\Omega)$

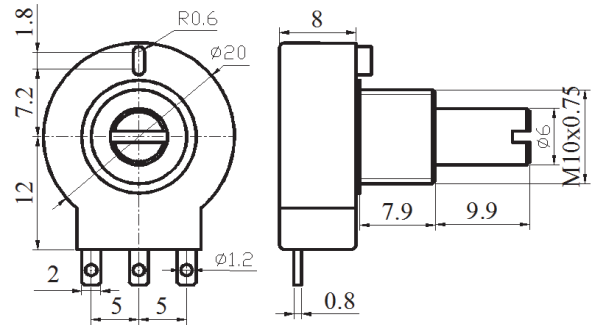
■ 物理特性 Physical Characteristics

- 启动力矩 Starting torque: $\leq 3mN.m$
- 终端止档力矩 Stop Torque: $\leq 300mN.m$
- 重量 Weight: $\leq 25g$
- 标志: 商标、型号、阻值、日期代码
Marking: Code symbol, type, resistance, date code
- 安装形式 Mounting: 轴套安装 Bushing Mounted
- 标准包装 Standard package: 20 只/盒, 20pcs/box

■ 电路图 Circuit Diagram



■ 外形尺寸图 Dimensions



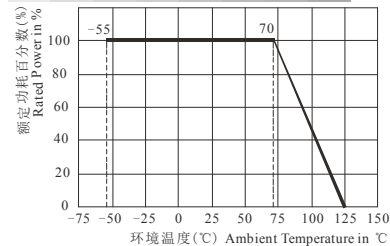
POD20 KSP102

公差按 GB1804-79, Tolerance: as specified in GB1804-79

引出端形式 Terminal type:

- MP (表示 Express: 长直引线 PC pins)
- KSP102 (表示 Express: 带孔引线 Solder lugs)
- ML (表示 Express: 电缆线 Cable)

■ 降功耗曲线 Derating



■ 标称阻值表

Nominal Resistance Table

阻值 Resistance (Ω)	分辨力 Resolution (%)
50	0.48
100	0.44
200	0.45
500	0.4
1K	0.32
2K	0.25
5K	0.19
10K	0.15
20K	0.10

■ 订货指南 Ordering Information

P-O-D-20-MP-10k

精密 Precision - 单圈 single turn - 线绕 Wirewound -
型号 Type - 引出端形式 Terminal type -
标称阻值 Resistance