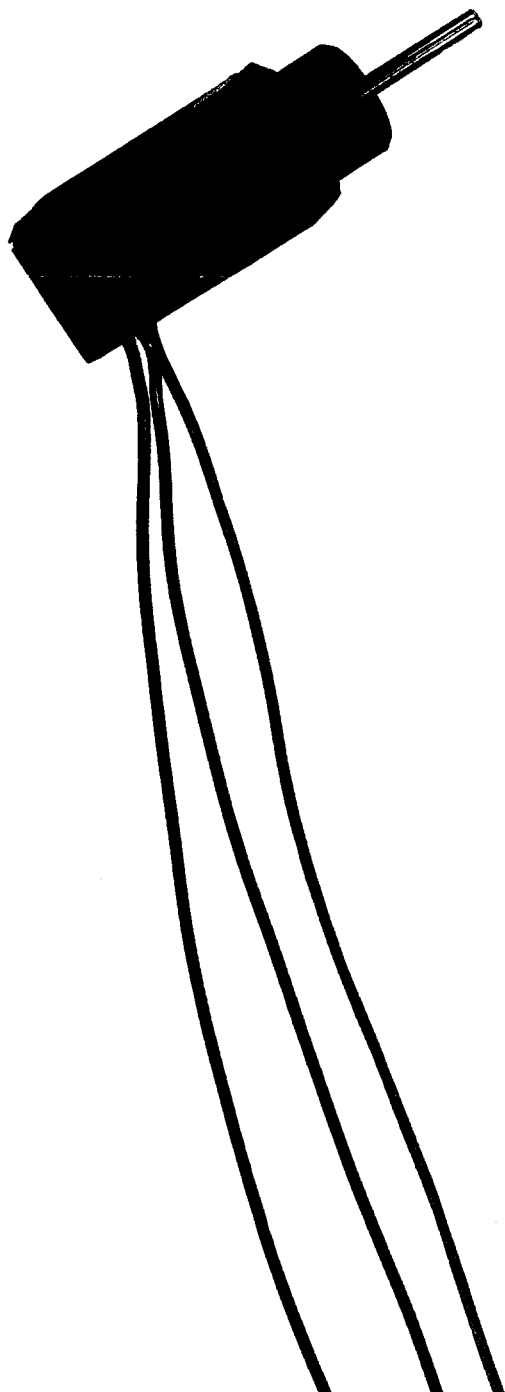


RS 317-780



Conductive Polymer Potentiometers for Automotive Applications

Series CP17/210 and LM series

Features

- Designed for automotive and similar demanding applications.
- High performance, cost effective potentiometers, with long endurance life.
- Protected against engine compartment environment.
- Flying leads and connectors to customer's specification.
- Lever drive configured to customer's requirements.

Electrical Specification

Standard Resistance Range

500 ohms to 10K.

Tolerance

±20%, (±10% available).

Independent Linearity

± 2%; may be improved by automatic law trimming.

Temperature Characteristic

0 to 200 ppm/°C max.

Output Smoothness

0.5% (CP17210) 1.0% (LM10).

Operating Temperature

-40°C to +130°C

Isolation Voltage

500V a.c. r.m.s.

Insulation Resistance

>10M ohms at 500V

Hysteresis

<0.3%

LM10

Effective travel

10mm ±0.5mm

Mechanical travel

12.5mm max.

Operational force

200-750g All Potentiometers are fitted with a return spring.

Mechanical endurance life

3,000,000 cycles.

Note: Tolerance on linearity is related to track length, for further data see the application note below.

Application notes: Potentiometers having conductive polymer tracks are tested as potential dividers with a wiper load resistance of a minimum of 100 times the track resistance.

This load resistance is calculated for a 350 degree track.

Potentiometers with reduced track length should ideally be matched with the appropriate higher wiper load.

350 degrees:	100 times
180 degrees:	200 times
90 degrees:	400 times

If the component is used as a variable resistor certain performance parameters may well differ from those quoted herein.

LM10

