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Resistors And
Resistive Applications

PR24
SINGLE-TURN ROTARY POTENTIOMETERS

Description

The PR 24 series are single-turn, housed in a metal case, rotary carbon control potentiometers. They comprise a carbon resistive track fitted on a resin modified paper base. Base diameter of potentiometers is 24 mm. Resistance track can be linear-A, logarithmic-B, inverse logarithmic-C. Potentiometers are made single or tandem, with plastic or metallic spindle. Terminals are designed for PCB or soldering pins.

Applications

Potentiometers are widely used in electronic audio video equipment, electric domestic equipment and outer control elements in professional use too.

Quick Reference Data

Parameter	Value
Nominal resistance R_N	According series E3 (1 - 2, 2 - 4, 7 - 10 etc.)
Resistance range: A low (linear) (ohms) B low (logarithmic) (ohms) C low (reverse logarithmic) (ohms)	100 ÷ 2,2M 1k ÷ 1M 1k ÷ 1M
Tolerance of resistance (%)	±5% on R_N less or = 470kohms on request ±10% on R_N more than = 470kohms on request ±20% on R_N less or = 470kohms on request ±30% on R_N more than 470kohms on request
Max. dissipation P_N at T_{amb}= 40°C: A low (W) B low (W) C low (W)	0.5 0.25 0.25
Maximum working voltage: A law (V) B law (V) C law (V)	250 250 250
Insulating voltage (V_{DC})	350 /2100 (pulse value)
Total mechanical angle of rotation (°)	300±10
Maximum dissipation at category temperature	25% P_N
Climatic category	25/070/10
Switch data: voltage/current	250V/3A AC

Marking

Marking on metal case: producer "TELPOD"; rated resistance; month and year of production.

Ordering example:

Please order according example:

1. We need potentiometers 24 mm diameter; without switch; resistance 47kohms; linear A law; diameter of spindle 6 mm, long of spindle 40 mm; type of spindle end P-6.

Potentiometer PR 246 47kohms A 40 P6

2. We need potentiometers 24 mm diameter; with switch; resistance 22kohms; logarithmic C; plastic spindle, diameter of spindle 6 mm, long of spindle 25 mm; type of spindle end P-5

Potentiometer PR 2462 s55 22kohms C 25 P5

Packing

The potentiometers can be supplied in bulk packing in a plastic bags and in a carton box.

Resistance Laws:

Fig. 1. Resistance laws: A - linear; B-logarithmic, C-reverse logarithmic.

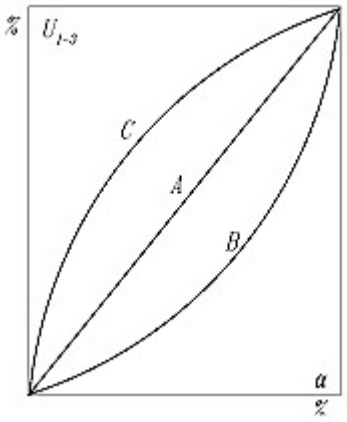


Fig. 2. Derating curve versus ambient temperature.

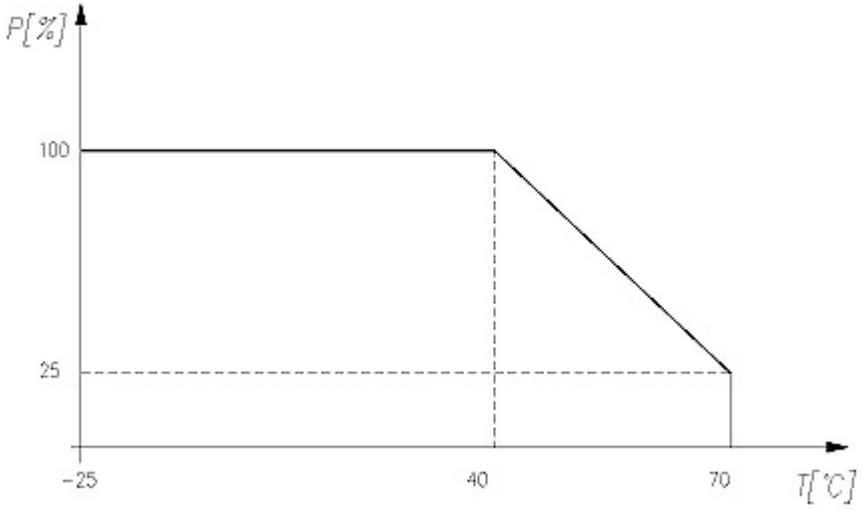


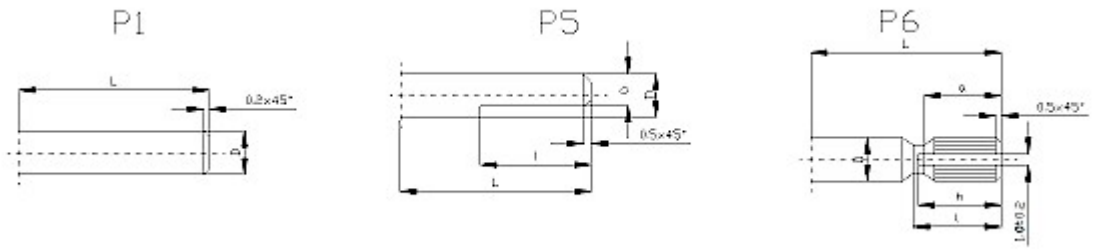
Fig. 2. Power dissipation curve of potentiometers versus ambient temperature.

Derating curve: Potentiometers could be dissipated of power from 100% nominal power at ambient temperature ≤ +40^{o}C up to 25% nominal power at ambient temperature +70^{o}C.

Summary

Type of potentiometer	Switch	Spindle material	Diameter of Spindle (mm)	Standard spindle long (mm)	Type of spindle end
PR 246	No	Metal	6	16; 20; 25; 32; (40)	P-1; P-5; P-6
PR 2461 s55	Yes	Metal	6	16; 20; 25; 32; (40)	P-1; P-5; P-6
PR 2462	No	Plastic	6	(20); 25; (32)	(P-1); P-5
PR 2462 s55	Yes	Plastic	6	(20); 25; (32)	(P-1); P-5

Spindles



Indicating of spindle ends	Dimensions (mm)					
	Diameter D	L/l/a/h				
P-1	6	16/-/-/-	20/-/-/-	25/-/-/-	32/-/-/-	40/-/-/-
P-5	6	16/8/4,5/-	20/10/4,5/-	25/10/4,5/-	32/10/4,5/-	40/10/4,5/-
P-5 (plastic)	6	-	-	25/12/4,5/-	-	-
P-6	6	16/8/6/7	20/12/10/11	25/14/12/13	32/14/12/13	40/14/12/13

Outline View of Potentiometers