



MODELS 3681/82/83/84/85 PUSHBUTTON POTENTIOMETER SNAP-IN MOUNTING CERMET-ELEMENTS



STANDARD SPECIFICATIONS

Electrical Characteristics

Resistance Range 10 Ω – 1 Meg. Ω
Resistance Tolerance..... $\pm 3.0\%$
Absolute Minimum Resistance
3 Ω or 0.2% of total resistance
whichever is greater
Resolution: 3681 10%
3682 1.0% 3683 0.1%
3684 0.01% 3685 .. 0.001%

Note:

Max. attainable output voltage:
100% minus resolution

Insulation Resistance @

500 V = 1000 Meg. Ω min.

Power Rating: 25 $^{\circ}\text{C}$ 2 W
85 $^{\circ}\text{C}$ 0 W

Dielectric Strength @

Sea Level 1000 V ~ min.

Accuracy:

Dial Reading to Output Ratio
 $\pm 0.5\%$ of full scale

Repeatability of Dial Reading
0.1% of full scale

Environmental Characteristics

Temperature Range

..... -25°C to $+85^{\circ}\text{C}$

Vibration @ 10 G

Contact Bounce .. 0.1 ms max.

Wiper Shift . 0.2% voltage ratio

Shock @ 50 G same as vibration

Load Life @ 1000 hours

Total Resistance Shift. $\pm 2.0\%$

TEMPCO..... ± 100 ppm/ $^{\circ}\text{C}$

Mechanical and Physical Characteristics

Expected Life:

75,000 button operations/decade

Weight..... (3683) approx. 23 g

Terminals 0.11 wide x 0.016 thick

solder lugs for 3# 20 AWG wires

Readout Marking:

..... 10 positions/decade

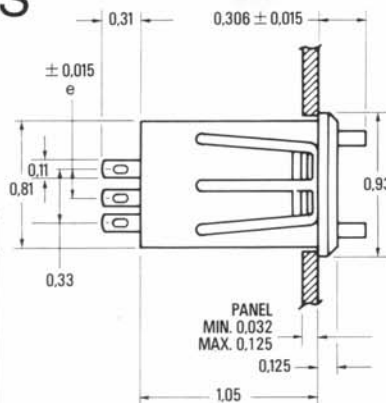
Markings: Manufacturer's name

wiring diagram, part number,

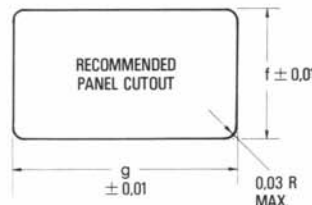
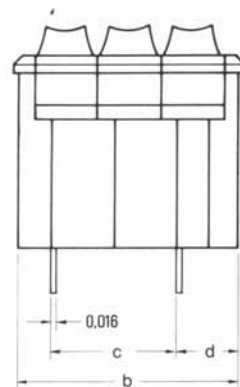
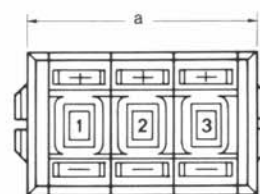
resistance value, date code.

Closer performance tolerance

can be supplied upon request.



DIMENSIONS (INCH)



Tolerances except as shown:

,XX ± 0.015 ,XXX ± 0.005

STANDARD RESISTANCE VALUES

● Preferred resistance values

Model	3681	3682	3683	3684	3685	Model	3681	3682	3683	3684	3685
Digits	1	2	3	4	5	Digits	1	2	3	4	5
10 Ω	X					5 K Ω	X	● X	● X		
20 Ω	X					10 K Ω	X	● X	● X	● X	
50 Ω	X					20 K Ω		X	X	X	
100 Ω	X	X				50 K Ω		X	X	X	
200 Ω	X	X				100 K Ω	X	X	● X	X	X
500 Ω	X	X				500 K Ω			X	X	X
1 K Ω	X	● X	● X			1 M Ω		X	● X	X	X
2 K Ω	X	X	● X								

DECADE DIMENSION CHART

Model	Dimensions					Panel Cutout		Weight (approx.)	
	a	b	c	d	e	f	g	oz	g
3681 S	0.65	0.59	—	0.39	0.165	0.83	0.62	0.336	9.5
3682 S	1.05	0.99	0.42	0.47	0.330	0.83	1.02	0.576	16.3
3683 S	1.46	1.39	0.73	0.47	0.165	0.83	1.42	0.824	23.4
3684 S	1.87	1.79	1.21	0.47	0.303	0.83	1.82	1.072	30.4
3685 S	2.27	2.19	1.54	0.47	0.165	0.83	2.22	1.320	37.4

Panel Seals (H-385 Series) available

Specifications are subject to change without notice.