Model DB62

RESISTANCE STANDARDS & INSTRUMENTS

Dekabox In-Line Decade Resistors

- Four Models each covering six decades
  - 0.01 Ω through 11.1111 kΩ
  - 0.1 Ω through 111.111 kΩ
  - 1 Ω through 1.11111 MΩ
  - 10 Ω through 11.1111 MΩ
- 0.01 % Initial Accuracy
- Serves DC through Audio Frequency Applications
- Great Stability due to 5ppm/°C Temperature Coefficient and 0.15 ppm/mW Power Coefficient for values 1 kΩ and up
- Short term switch repeatability ±0.24 mΩ typical

The Model DB62 Dekabox In-Line Decade Resistor provides dependable long-term service in precision DC through audio frequency applications. Six decades of non-inductive, precision, wire-wound fixed resistors are mounted in a low noise shielded aluminum housing.

The DB62 is easy to use. The input terminals and a case connected ground terminal are conveniently located on the front panel. The dials rotate independently through 360 degrees to simplify and speed settings. This allows for a coarse approximation and then precise finer steps to provide an exact resistance value.

Accuracy over a wide range of ambient conditions is assured by the use of resistors with good temperature and power coefficients. Repeatability is assured by the use of switches that have multiple contacts of solid silver-alloy.

The Dekabox resistance values are easily read from the large-numeral in-line presentation above the knobs. Resistance per step and current ratings of each decade are presented above the knobs for operator convenience and circuit safety.

TEGAM®

YOUR GLOBAL SOURCE FOR TEST AND MEASUREMENT SOLUTIONS

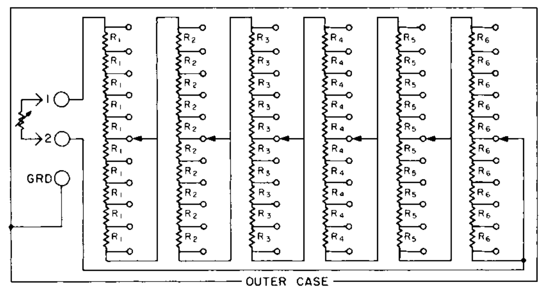
Model DB62

DEKABOX IN-LINE DECADE RESISTORS

Specifications

Model No. DB62	Total Resistance Ω	Smallest Step Ω	Resistance Values (Ω) R1	R2	R3	R4	R5	R6
	11.1111 M	10	1 M	100 k	10 k	1 k	100	10
	1.11111 M	1	100 k	10 k	1 k	100	10	1
	111.111 k	0.1	10 k	1 k	100	10	1	0.1
	11.1111 k	0.01	1 k	100	10	1	0.1	0.01

Accuracy	Accuracy of resistance increments is given in the table below. Accuracy of resistance change from zero setting is given below.
Initial (60 days)	±(0.01 % + 3 mΩ)
Long-term	±(0.02 % + 6 mΩ)/year
Short-Term Switching Repeatability	±0.24 mΩ (typical)
Number of Decades	Six
Total Resistance	See table above
Resistance per Decade	See table above
Smallest Step	See table above
Resistance at Zero Setting	Approximately 12 mΩ
Breakdown Voltage	1,000 V peak to case
Dimensions	
Height	10.9 cm (4.3 in)
Width	45.7 cm (18.0 in)
Depth	12.45 cm (4.9 in)
Weight	2.2 kg (4.5 lb)
Included Accessories	
Manual	P/N 7275
Z540 Compliant Calibration with Certificate and Data for DB62	P/N OPT-Z540



Dekabox Schematic Diagram

Model DB62 ratings per step for each decade

Resistance Per Decade (Ω)	Resistance[1] Value R (Ω)	Incremental Accuracy Initial (%)	Long-term (%)	Coefficients Temperature (ppm/ºC)	Power (ppm/mW/step)	Measurement Duty[2] Maximum Ratings Power (mW/step)	Current (mA)	Peak Voltage (V/step)
10 M	1 M	0.01	0.02	5	0.15	100	0.3	300
1 M	100 k	0.01	0.02	5	0.15	1000	3.2	300
100 k	10 k	0.01	0.02	5	0.15	1000	10	100
10 k	1 k	0.01	0.02	5	0.15	1000	32	32
1 k	100	0.01	0.02	5	0.15	1000	100	10
100	10	0.012	0.025	15	0.45	1000	320	3.2
10	1	0.03	0.07	20	0.6	1000	1000	1
1	0.1	0.2	0.5	60	3	500	2200	0.2
0.1	0.01	2	5	400	60	160	4000	0.04

[1] Refers to previous table
[2] Intermittent use such that temperature rise of the resistor will not appreciably exceed that which would occur in free air.

TEGAM®
YOUR GLOBAL SOURCE FOR TEST AND MEASUREMENT SOLUTIONS

10 TEGAM WAY • GENEVA, OHIO 44041
440-466-6100 • FAX 440-466-6110
www.tegam.com • e-mail: sales@tegam.com