DB62 Series

The DB62 Series offers a dependable, long-term service in precision dc through audio frequency applications. The units feature 6 decades with non-inductive, precision resistors mounted in a low-noise, shielded housing. After inheriting the DB62 series from esi, IET used its own resistance technology to significantly improve the stability of the unit.

Sample DB62 Decade Resistor

Features:

- Four available models
- High accuracy: ±(0.01% + 2 mΩ)
- Serves DC through audio frequency applications
- Improved stability: ±20 ppm/year
- Low TC: ±5 ppm/°C

SPECIFICATIONS

Resistance per step	Total decade resistance	Max current	Max voltage (per step)	Max power (per step)	Stability (±ppm/yr)	Long-term stability (±ppm/3 yrs)	Temperature coefficient (±ppm/°C)	Resistor type
					Improved	Improved		
10 mΩ	100 mΩ	4.0 A	40 mV	0.16 W	50	75	20	Resistance wire
100 mΩ	1 Ω	1.6 A	0.16 V	0.25 W	50	75	20	
1 Ω	10 Ω	0.8 A	0.8 V	0.6 W	20	25	20	Wirewound, non-inductive
10 Ω	100 Ω	0.25 A	2.5 V	0.6 W	20	25	15	
100 Ω	1 kΩ	80 mA	8 V	0.6 W	20	25	5	
1 kΩ	10 kΩ	23 mA	23 V	0.5 W	20	25	5	
10 kΩ	100 kΩ	7 mA	70 V	0.5 W	20	25	5	
100 kΩ	1 MΩ	2.3 mA*	230 V*	0.5 W*	20	25	5	
1 MΩ	10 MΩ	0.7 mA*	700 V*	0.5 W*	20	25	10	

**Subject to maximum of 2000 V to case*

Accuracy:
±(0.01% + 2 mΩ)
after subtraction of zero resistance, at 23°C; traceable to SI

Zero resistance:
<1 mΩ per decade at dc

Max voltage to case:
2000 V peak

Terminals:
Gold-plated, 5-way, tellurium-copper binding posts with low thermal emf and low resistance. Rear outputs are available as an option.

Environmental conditions:
Operating: 10°C to 40°C; <50% RH
Storage: -40°C to 70°C

Switches:
Six decades
Continuous rotation
11 positions marked "0"-"10"
Multiple solid silver-alloy contacts

Mechanical:
Dimensions: 43.9 cm W x 8.9 cm H x 10.2 cm D (17.3" x 3.5" x 4")
Weight: 2.4 kg (5.3 lb)

ORDERING INFORMATION

DB62-11K	Dekabox, 6-decade, 11.111 kΩ, 0.01 Ω per step
DB62-111K	Dekabox, 6-decade, 111.111 kΩ, 0.1 Ω per step
DB62-1M	Dekabox, 6-decade, 1.11111 MΩ, 1 Ω per step
DB62-11M	Dekabox, 6-decade, 11.1111 MΩ, 10 Ω per step

IET LABS, INC. in the GenRad Tradition
534 Main Street, Westbury, NY 11590
www.ietlabs.com
TEL: (516) 334-5959 • (800) 899-8438 • FAX: (516) 334-5988