

Standard Resistance Reference or Working Standards

SRX • SRA • SRC • Series

Economical high performance resistance standards.

- Very stable - up to 10 ppm/yr
- Excellent TC - as low as 1 ppm/°C
- Rugged
- Wide range of values - 1 mΩ to 10 TΩ
- Optional values available
- Optional transit case

SRX/SRA SERIES

Designed for use as a reference or working standard in industrial, research, and educational laboratories.

SRC SERIES

Economical high resistance, high voltage standards for applications requiring values up to 10 TΩ

SRC Maximum Voltage: 5000 V.



SRA Series Resistance Standard

SPECIFICATIONS

Model	Nominal Value (Ω)	Adjustment to Nominal (ppm)		Calibration Uncertainty (ppm)	Stability 1 year (ppm)		Tempco (ppm/°C)		Power Coef. (ppm/mW)		Max. Power (W)		Max. Voltage (V)		Max. Current	
		SRX	SRA		SRX	SRA	SRX	SRA	SRX	SRA	SRX	SRA	SRX	SRA	SRX	SRA
0.001	0.001	200	500	200	50	100	20	20	0.1	0.1	0.2	0.2	0.015	0.015	14 A	14 A
0.0019	0.0019	200	500	200	50	100	20	20	0.1	0.1	0.38	0.38	0.03	0.03	14 A	14 A
0.002	0.002	200	500	200	50	100	20	20	0.1	0.1	0.2	0.2	0.02	0.02	10 A	10 A
0.01	0.01	200	500	100	50	100	20	20	0.1	0.1	2	2	0.15	0.15	14 A	14 A
0.019	0.019	200	500	100	50	100	20	20	0.1	0.1	3.8	3.8	0.3	0.3	14 A	14 A
0.1	0.1	200	500	20	50	100	20	20	0.1	0.1	1	1	0.3	0.3	3 A	3 A
0.19	0.19	200	500	20	50	100	20	20	0.1	0.1	1.7	1.7	0.6	0.6	3 A	3 A
1	1	20	100	10	20	50	10	20	0.5	1	0.25	1	0.5	1	0.5 A	1 A
1.9	1.9	20	100	10	20	50	10	20	0.5	1	0.25	1	0.7	1.4	0.36 A	0.73 A
10	10	10	30	5	10	18	3	5	0.15	0.25	0.1	1	1	3	0.1 A	0.3 A
19	19	10	30	5	10	18	3	5	0.15	0.25	0.1	1	1.4	4.4	70 mA	23 mA
50	50	10	20	5	10	15	1	3	0.05	0.15	0.1	1	2.3	7	45 mA	140 mA
100	100	10	20	5	10	15	1	3	0.05	0.15	0.1	1	3	10	30 mA	0.1 A
190	190	10	20	5	10	15	1	3	0.05	0.15	0.1	1	4.4	14	23 mA	70 mA
1K	1 k	10	20	2	10	15	1	3	0.05	0.15	0.1	1	10	30	10 mA	30 mA
1.9K	1.9 k	10	20	2	10	15	1	3	0.05	0.15	0.1	1	14	42	7 mA	22 mA
10K	10 k	10	20	2	10	15	1	3	0.05	0.15	0.1	1	30	100	3 mA	10 mA
19K	19 k	10	20	2	10	15	1	3	0.05	0.15	0.1	1	43	140	2.2 mA	7 mA
100K	100 k	10	20	2	10	15	1	3	0.05	0.15	0.1	1	100	300	1 mA	3 mA
190K	190 k	10	20	2	10	15	1	3	0.05	0.15	0.1	1	140	440	0.7 mA	2.2 mA
1M	1 M	20	50	5	15	20	3	10	0.15	0.5	0.1	1	316	1000	0.3 mA	1 mA
1.9M	1.9 M	20	50	5	15	20	3	10	0.15	0.5	0.1	0.5	440	1000	0.23 mA	0.5 mA
10M	10 M	20	50	10	25	50	5	10	0.25	0.5	0.1	0.1	1000	1000	0.1 mA	0.1 mA
19M	19 M	20	50	10	20	50	5	15	0.7	0.7	0.05	0.05	1000	1000	50 μA	50 μA
100M	100 M	50	100	15	20	100	5	25	1.2	1.2	0.01	0.01	1000	1000	10 μA	10 μA

SRC-19M	19 M	100 ppm	15	100	15
SRC-100M	100 M	100 ppm	30	200	25
SRC-190M	190 M	0.1%	30	500	25
SRC-1G	1 G	0.5%	100	500	50
SRC-1.9G	1.9 G	0.5%	100	500	50
SRC-10G	10 G	0.5%	200	500	50
SRC-19G	19 G	0.5%	500	500	50
SRC-100G	100 G	0.5%	900	500	50
SRC-190G	190 G	1%	900	500	50
SRC-1T	1 T	2%	2500	500	100
SRC-1.9T	1.9 T	2%	2500	1000	200
SRC-10T	10 T	3%	10000	2000	300

SRC Series Maximum Voltage: 5000 V.

Multiple units in single housing available.

GENERAL

Test Conditions: Four-terminal Kelvin measurements, low power, at 23°C; two-terminal for 1 MΩ and over. **Initial calibration data traceable to NIST is provided.**

Terminals: Four 5-way binding posts for 4-terminal measurement for 190 kΩ and under; two binding posts for 1 MΩ and over. The binding posts are constructed of tellurium copper for low thermal emf and low resistance. A case ground terminal is also provided.

Dimensions: 8.6 cm H x 10.5 cm W x 12.7 cm D (3.4" x 4.15" x 5").

Transit Case: Optional **Model SRC-100** lightweight transit case with handle, suitable for transporting and storing two units. The case provides mechanical protection and insulation from temperature changes during transportation or shipping.

Operating Temperature Range:

SRX, SRC: 15 to 30°C.

SRA: 10 to 40°C.



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