SECTION II - SPECIFICATIONS

The operating specifications for the 2724A are listed in table 2-2.

The environmental specifications are listed below in Table 2-1.

Table 2-1: General Specifications

Dimensions:	89mm (3.5 in) H x 432mm 17 in) W x 432mm (17 in) D
Weight:	7.2kg 16 lb net, 10.5kg (23 lb) shipping
Power:	115/230 VAC ± 10% at 48 to 440 Hz, 30 VA
Temperature:	0 to 50C - Operating -30 to 70C - Storage
Humidity:	5 to 70% RH (non-condensing)

Table 2-2: Operating Specifications

Accuracies below are relative to NBS traceable standards and are valid at +5°C from calibration temperature within 15°C to 30°C. Add 21ppm for absolute accuracy utilizing Valhalla's production calibration traceability uncertainties.

2724A Active Mode Operation

Resistance in Ohms	Current Min.	Current Max.	Accuracy (for 90 Days) ±5°C)	Stability (DC to 1Hz) 24 Hr.	Stability (DC to 1Hz) 1 Year	Temperature Coefficient in ppm/°C	Setting Time in seconds: Change in Current	Setting Time in seconds: Change in Value
0 to 120	500μA	120mA	7ppm+2mΩ	2ppm	10ppm	1.5	2	2
120 to 1.2K	50μA	12mA	7ppm+7mΩ	2ppm	10ppm	1.5	2	2
1.2K to 12K	5μA	1.2mA	7ppm+50mΩ	2ppm	10ppm	1.5	2	2
12K to 120K	500nA	120μA	7ppm+500mΩ	2ppm	10ppm	1.5	2	2
120K to 1.20M	50nA	12μA	12ppm+5Ω	2ppm	10ppm	3	2	2
1.2M to 12M	5nA	1.2μA	20ppm+50Ω	2ppm	15ppm	5	3	2
12M to 120M	500pA	120nA	40ppm+1KΩ	500Ω	50ppm	15	4	2
120M to 1.2G	50pA	12nA	0.1%+50KΩ	50KΩ	0.05%	15	6	3
1.2G to 11G	5pA	1.2nA	0.1%+5MΩ	5MΩ	0.05%	15	15	5

Table 2-2: Operating Specifications (Continued)

2724A Fast Mode Operation (Active)

Resistance in Ohms	Current pk. max.	One Year ±5°C Absolute Accuracy in Ohms	Temperature Coefficient in Ohms/°C	Setting Time in milliseconds		0.05% Error Frequency
				Change in Current	Change in Value	
0 to 120	120mA	0.04	0.006	0.1	5	3KHz
120 to 1.2K	12mA	0.4	0.06	0.1	5	3KHz
1.2K to 12K	1.2mA	4	0.6	0.1	5	3KHz
12K to 120K	120μA	40	6	0.2	5	2KHz
120K to 1.2M	12μA	400	60	1	5	500Hz
1.2M to 12M	1.2μA	6K	600	10	10	50Hz
12M to 120M	120nA	60K	6K	500	100	--
120M to 1.2G	12nA	600K	60K	5 Sec.	2 Sec.	--
1.2G to 11G	1.2nA	6M	600K	15 Sec.	5 Sec.	--

Table 2-2: Operating Specifications (Continued

2724A CPR Mode Operation (Slow or Fast Modes)

Resistance in Ohms	Current Max.	Accuracy (for 90 days ±5°C)	Stability (DC to 1Hz)		Temperature Coefficient in ppm/°C	Settling Time in Milliseconds	
			24 Hr.	1 Year		Fast Mode	Slow Mode
100	120mA	7ppm+2mΩ	2ppm	10ppm	1.5	0.1	100
1K	12mA	7ppm+7mΩ	2ppm	10ppm	1.5	0.1	100
10K	1.2mA	7ppm+50mΩ	2ppm	10ppm	1.5	0.1	100
100K	120µA	7ppm+500mΩ	2ppm	10ppm	1.5	0.1	100
1M	12µA	12ppm+5Ω	2ppm	10ppm	3	0.3	1 Sec.
10M	1.2µA	20ppm+50Ω	2ppm	15ppm	5	3	5 Sec.

Output Configuration: 2-wire/4-wire, front and rear terminals standard.

Leakage Current: ± 2pA ± 0.2pA/°C

Power Coefficient: 0.15ppm/mW

Noise and Thermals: (DC to 10Hz, 4-terminal
CPR Mode ± 2uV Maximum
Standard Mode ± 4uV Maximum
Fast Mode ± 30uV Maximum

Maximum Input: 25V peak or 120mA if option CPR installed: 15mA maximum in active modes)

Warm-up Time: 15 minutes to within 5ppm of final value