

Type 1776 Precision Decade Resistor Voltage Dividers

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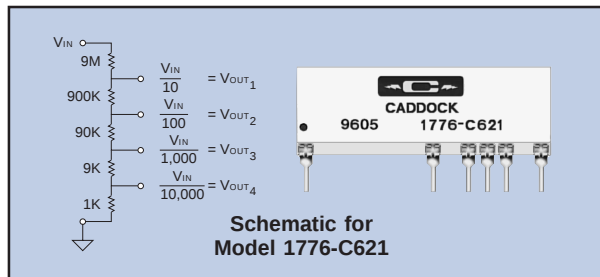
Input Voltage Dividers for Digital Multimeters and Range-Switching Instruments

The exceptional performance of this extensive family of Type 1776 Precision Decade Resistor Voltage Dividers has been achieved through the special combination of advantages provided by Caddock's Tetrinox® resistance films. This advanced film resistor technology provides the performance characteristics required by the precision input signal circuits of both bench-type and laboratory digital instruments.

In addition to requiring less board space, these compact precision resistor networks deliver higher performance than selected discrete resistor sets and thin-film networks.

There are now 39 standard models in the expanded family of Type 1776 precision resistor networks that include:

- 3, 4 and 5 - decade voltage dividers with ratios from 10:1 to 10,000:1.
- 1,200 volts continuous ratings and overvoltage to 2,000 volts.
- Many combinations of Ratio and Absolute Tolerance, and Ratio and Absolute Temperature Coefficient.



For complete information on quantity price and delivery, call or write our Sales Office.

Model No.	Resistance Values					Fig.	Voltage Rating ⑦	Absolute Tolerance %	Ratio Tolerance %	Absolute TC ppm/°C	Ratio TC ppm/°C	Voltage Coefficient of Ratio ppm/volt	Ratio Stability % Change in Ratio		
	R1	R2	R3	R4	R5								Load Life ④	Shelf Life ⑤	Over-Voltage ⑥
1776-C61	9 Meg	900 K	90 K	9 K	900	6	1200	0.1	0.1	30	10	0.1	0.01	0.005	0.01
1776-C611	9 Meg	900 K	90 K	9 K	900	6	1200	0.1	0.05	30	10	0.1	0.01	0.005	0.01
1776-C6117	9 Meg	900 K	90 K	9 K	900	6	1200	0.1	0.02	30	10	0.1	0.01	0.005	0.01
1776-C62	9 Meg	900 K	90 K	9 K	1 K	6	1200	0.1	0.1	30	10	0.1	0.01	0.005	0.01
1776-C621	9 Meg	900 K	90 K	9 K	1 K	6	1200	0.1	0.05	30	10	0.1	0.01	0.005	0.01
1776-C6217	9 Meg	900 K	90 K	9 K	1 K	6	1200	0.1	0.02	30	10	0.1	0.01	0.005	0.01
1776-C732	9 Meg	900 K	90 K	9 K	900	7	1200	0.25	0.25	50	50	0.5	0.04	0.02	0.04
1776-C73	9 Meg	900 K	90 K	9 K	900	7	1200	0.1	0.1	50	50	0.5	0.04	0.02	0.04
1776-C742	9 Meg	900 K	90 K	9 K	1 K	7	1200	0.25	0.25	50	50	0.5	0.04	0.02	0.04
1776-C74	9 Meg	900 K	90 K	9 K	1 K	7	1200	0.1	0.1	50	50	0.5	0.04	0.02	0.04
1776-232	9 Meg	900 K	90 K	9 K	900	3	1200	0.25	0.25	50	50	0.3	0.04	0.02	0.04
1776-23	9 Meg	900 K	90 K	9 K	900	3	1200	0.1	0.1	50	50	0.2	0.02	0.01	0.02
1776-231	9 Meg	900 K	90 K	9 K	900	3	1200	0.1	0.05	50	50	0.2	0.02	0.01	0.02
1776-242	9 Meg	900 K	90 K	9 K	1 K	3	1200	0.25	0.25	50	50	0.3	0.04	0.02	0.04
1776-24	9 Meg	900 K	90 K	9 K	1 K	3	1200	0.25	0.1	50	50	0.2	0.02	0.01	0.02
1776-241	9 Meg	900 K	90 K	9 K	1 K	3	1200	0.25	0.05	50	50	0.2	0.02	0.01	0.02
1776-10	9 Meg	900 K	90 K	10 K	N/A	4	1200	+0, -0.5	0.1	30	10	0.02	0.01	0.005	0.01
1776-105	9 Meg	900 K	90 K	10 K	N/A	4	1200	+0, -0.5	0.1	30	5	0.02	0.01	0.005	0.01
1776-C10	9 Meg	900 K	90 K	10 K	N/A	9	1200	+0, -0.5	0.1	30	10	0.02	0.01	0.005	0.01
1776-C105	9 Meg	900 K	90 K	10 K	N/A	9	1200	+0, -0.5	0.1	30	5	0.02	0.01	0.005	0.01
1776-1	9 Meg	900 K	90 K	10 K	N/A	2	1200	0.25	0.05	30	10	0.02	0.01	0.005	0.01
1776-14	9 Meg	900 K	90 K	10 K	N/A	2	1200	0.25	0.1	30	10	0.02	0.01	0.005	0.01
1776-8	9.9 Meg	90 K	10 K	N/A	N/A	1	1200	0.25	0.1	30	25	0.2	0.02	0.01	0.02
1776-81	9.9 Meg	90 K	10 K	N/A	N/A	1	1200	0.25	0.05	30	25	0.2	0.02	0.01	0.02
1776-9	9.9 Meg	90 K	10 K	N/A	N/A	1	1200	0.25	0.1	30	10	0.02	0.01	0.005	0.01
1776-91	9.9 Meg	90 K	10 K	N/A	N/A	1	1200	0.25	0.05	30	10	0.02	0.01	0.005	0.01
1776-912	9.9 Meg	90 K	10 K	N/A	N/A	1	1200	0.25	0.02	30	5	0.02	0.01	0.005	0.01
1776-C4	10 Meg	1.1111M	101.01K	10.01K	1.0001K	8	1200	0.25	0.25	30	10	0.1	0.01	0.005	0.01
1776-C44	10 Meg	1.1111M	101.01K	10.01K	1.0001K	8	1200	0.1	0.1	30	10	0.1	0.01	0.005	0.01
1776-C441	10 Meg	1.1111M	101.01K	10.01K	1.0001K	8	1200	0.1	0.05	30	10	0.1	0.01	0.005	0.01
1776-C4417	10 Meg	1.1111M	101.01K	10.01K	1.0001K	8	1200	0.1	0.02	30	10	0.1	0.01	0.005	0.01
1776-C3	10 Meg	1.1111M	101.01K	10.01K	1.0001K	8	1200	0.5	0.5	50	50	0.5	0.04	0.02	0.04
1776-C34	10 Meg	1.1111M	101.01K	10.01K	1.0001K	8	1200	0.25	0.25	50	50	0.5	0.04	0.02	0.04
1776-C532	900 K	90 K	9 K	900	N/A	5	750	0.25	0.25	25	25	0.4	0.02	0.01	0.02
1776-C53	900 K	90 K	9 K	900	N/A	5	750	0.1	0.1	25	15	0.3	0.02	0.01	0.02
1776-C531	900 K	90 K	9 K	900	N/A	5	750	0.1	0.05	25	15	0.3	0.02	0.01	0.02
1776-C542	900 K	90 K	9 K	1 K	N/A	5	750	0.25	0.25	25	25	0.4	0.02	0.01	0.02
1776-C54	900 K	90 K	9 K	1 K	N/A	5	750	0.1	0.1	25	15	0.3	0.02	0.01	0.02
1776-C541	900 K	90 K	9 K	1 K	N/A	5	750	0.1	0.05	25	15	0.3	0.02	0.01	0.02

Specifications:

(Numbers inside circles reference columns in Model No. table)

- ① **Ratio Tolerance:** Maximum ratio difference between two resistors in the network. (See the specific Figures for the Ratio Definition).
- ② **Ratio Temperature Coefficient:** Ratio track from 0°C to +70°C.
- ③ **Voltage Coefficient of Ratio (ppm/volt):** R1 in series with any combination of R2, R3, R4 and R5, 100 volts to rated voltage.
- ④ **Load Life:** Ratio stability of resistance under full load at +70°C, rated voltage applied to R1 in series with any combination of R2, R3, R4 and R5.
- ⑤ **Shelf Stability of Ratio:** Six months at shelf conditions.
- ⑥ **Overvoltage:** Maximum voltage of 1.67 times rated DC voltage. Volts DC or peak AC applied to R1 and any combination of R2, R3, R4 and R5 in series with R1 for 10 seconds.
- ⑦ **Voltage Rating:** DC or RMS AC voltage applied to R1 in series with any combination of R2, R3, R4 and R5.

Storage Temperature: -55°C to +85°C.

Type 1776 Precision Decade Resistor Voltage Dividers

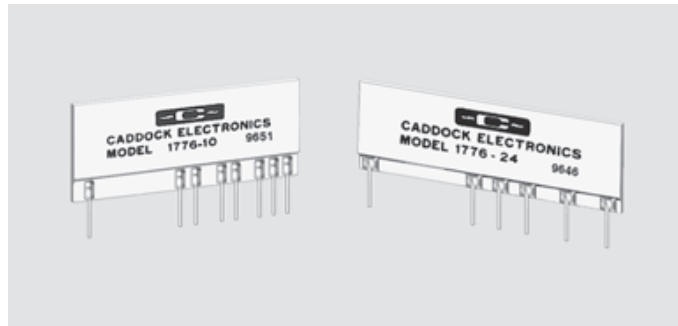
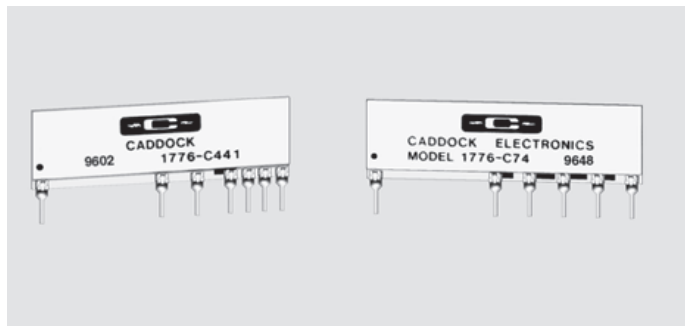


Figure 1

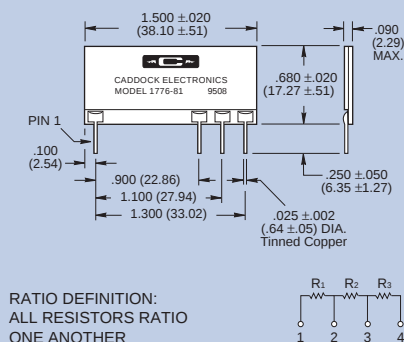


Figure 2

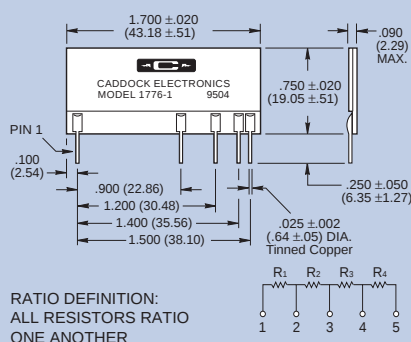


Figure 3

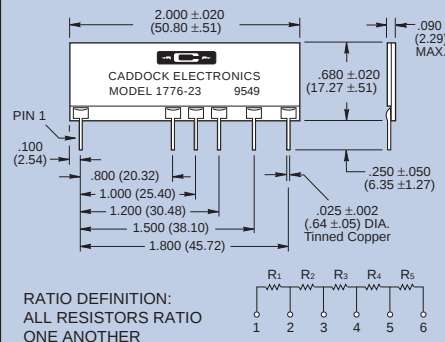


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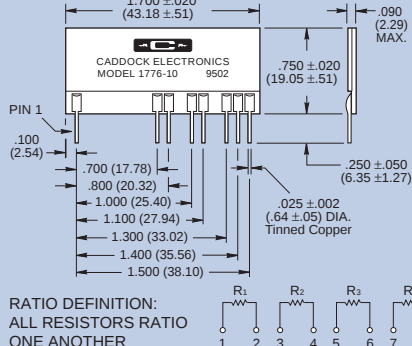


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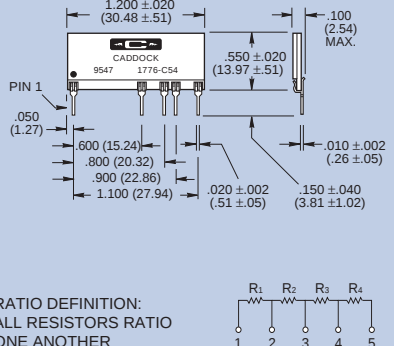


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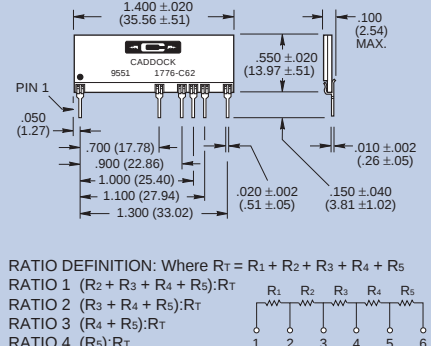


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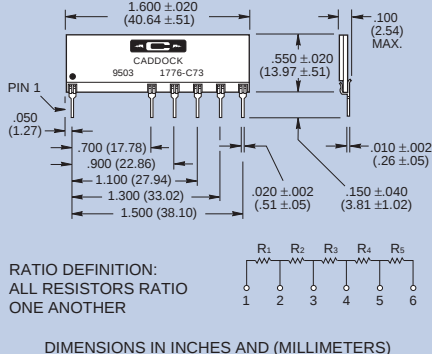


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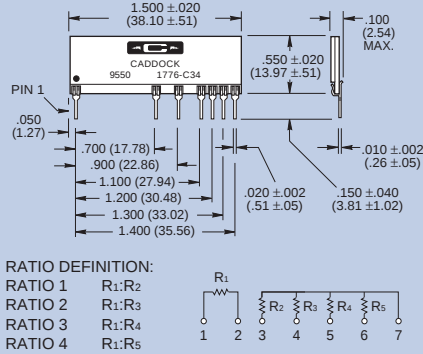


Figure 9

