

Precision Decade Voltage Dividers

Series 1776-X

Family of Input Voltage Dividers for Multimeters and other Instruments

Series 1776 - X Precision Decade Voltage Divider's Ceramic Protected Family of Input Voltage Dividers for Multimeters and other Instruments

EBG offers a family of Voltage Dividers for a variety of applications, including Digital Multimeters, Multi range instrumentation, and other range switching devices. This line of products utilizes the special EBG METOXFILM resulting in a family of Series 1776-X models:

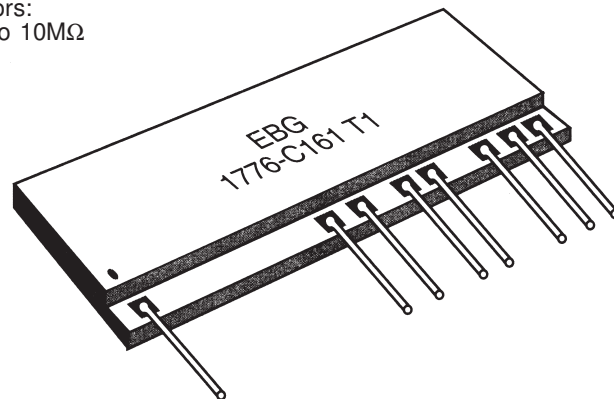
A summary of the features of the 1776-X series are:

- Compact precision resistor networks
- Easy to install package
- Absolute tolerances to ± 0.1 , ± 0.25 and $\pm 0.5\%$
- Relative tolerances to 0.05, 0.10 and 0.25%
- Ratio Temperature Coefficients from 10 to 50 ppm/ $^{\circ}\text{C}$
- High stability under load $< 0.02\%$
- Excellent Shelf Life: $< 0.02\%$

Many special combinations of ratios, absolute tolerances, relative tolerances and absolute temperature coefficients of resistance are available. Consult your EBG agent or the factory direct for your special requirements.

Specifications

- Ratio Tolerance: 0.05% to 0.25%
- Absolute Tolerance: $\pm 0.1\%$ to $\pm 0.5\%$
- Ratio Temp. Coefficient: 10ppm/ $^{\circ}\text{C}$ to 50ppm/ $^{\circ}\text{C}$
- Absolute Temp. Coefficient: $\pm 25\text{ppm}/^{\circ}\text{C}$ to $\pm 50\text{ppm}/^{\circ}\text{C}$
- Voltage Coefficient: $< 0.05\text{ppm}/\text{V}$
- Storage Temperature: -55°C to $+ 165^{\circ}\text{C}$
- Load Life (ratio stability): $< 0.04\%$
- Shelf Life (ratio stability): $< 0.02\%$ (six months)
- Number of Decades: 3 to 6
- Values of Single Resistors: 900 Ω to 10M Ω



Model-Nr.	Resistance Values					Figure	Voltage Rating	Absolute Tol. %	Ratio Tol. %	Absol. TC ppm/ $^{\circ}\text{C}$	Ratio TC ppm/ $^{\circ}\text{C}$	Vol. Coef. Ratio ppm/V	Ratio Stability % Change in Ratio			C
	R1 Ω	R2 Ω	R3 Ω	R4 Ω	R5 Ω								Load	Shelf	Over-Voltage	
B169 T3	9M	900K	90K	9K	900	1	1200	0.1	0.1	30	10	0.1	0.02	0.01	0.01	C
B168 T3	9M	900K	90K	9K	1K	1	1200	0.1	0.1	30	10	0.1	0.02	0.01	0.01	C
E167 T1	9M	900K	90K	9K	900	2	1200	0.25	0.25	50	50	0.5	0.04	0.02	0.04	C
B167 T1	9M	900K	90K	9K	900	2	1200	0.1	0.1	50	50	0.5	0.04	0.02	0.04	C
E166 T1	9M	900K	90K	9K	1K	2	1200	0.25	0.25	50	50	0.5	0.04	0.02	0.04	C
B166 T1	9M	900K	90K	9K	1K	2	1200	0.1	0.1	50	50	0.5	0.04	0.02	0.04	C
E16 T1	9M	900K	90K	9K	900	3	1200	0.25	0.25	50	50	0.3	0.04	0.02	0.04	C
B16 T1	9M	900K	90K	9K	900	3	1200	0.1	0.1	50	50	0.2	0.02	0.01	0.02	C
A16 T1	9M	900K	90K	9K	900	3	1200	0.1	0.05	50	50	0.2	0.02	0.01	0.02	C
E161 T1	9M	900K	90K	9K	1K	3	1200	0.25	0.25	50	50	0.3	0.04	0.02	0.04	C
D161 T1	9M	900K	90K	9K	1K	3	1200	0.25	0.1	50	50	0.2	0.02	0.01	0.02	C
C161 T1	9M	900K	90K	9K	1K	3	1200	0.25	0.05	50	50	0.2	0.02	0.01	0.02	C
F37 T3	9M	900K	90K	10K	N/A	4	1200	+0-0.5	0.1	30	10	0.02	0.02	0.01	0.01	
F379 T3	9M	900K	90K	10K	N/A	5	1200	+0-0.5	0.1	30	10	0.02	0.02	0.01	0.01	
C15 T3	9M	900K	90K	10K	N/A	6	1200	0.25	0.05	30	10	0.02	0.02	0.01	0.01	
D15 T3	9M	900K	90K	10K	N/A	6	1200	0.25	0.1	30	10	0.02	0.02	0.01	0.01	
D14 T2	9.9M	90K	10K	N/A	N/A	7	1200	0.25	0.1	30	25	0.2	0.02	0.01	0.02	C
D14 T3	9.9M	90K	10K	N/A	N/A	7	1200	0.25	0.1	30	10	0.02	0.02	0.01	0.01	C
E39 T3	10M	1.111M	101.01K	10.01K	1.0001K	8	1200	0.25	0.25	30	10	0.1	0.02	0.01	0.01	C
B39 T3	10M	1.111M	101.01K	10.01K	1.0001K	8	1200	0.1	0.1	30	10	0.1	0.02	0.01	0.01	C
G39 T1	10M	1.111M	101.01K	10.01K	1.0001K	8	1200	0.5	0.5	50	50	0.5	0.04	0.02	0.04	C
E39 T1	10M	1.111M	101.01K	10.01K	1.0001K	8	1200	0.25	0.25	50	50	0.5	0.04	0.02	0.04	C
E159 T5	900K	90K	9K	900	N/A	9	750	0.25	0.25	25	25	0.4	0.02	0.01	0.02	C
B159 T6	900K	90K	9K	900	N/A	9	750	0.1	0.1	25	15	0.3	0.02	0.01	0.02	C
A159 T6	900K	90K	9K	900	N/A	9	750	0.1	0.05	25	15	0.3	0.02	0.01	0.02	C
G158 T5	900K	90K	9K	1K	N/A	9	750	0.25	0.25	25	25	0.4	0.02	0.01	0.02	C
B158 T6	900K	90K	9K	1K	N/A	9	750	0.1	0.1	25	15	0.3	0.02	0.01	0.02	C
A158T6	900K	90K	9K	1K	N/A	9	750	0.1	0.05	25	15	0.3	0.02	0.01	0.02	C

C = ceramic coverplate available

In the above spec sheet, you will find our standard product, please contact your local manufacturing representative or call us direct to find out details of other options available regarding this style. Please see our website for the most updated information!