

Precision Decade Voltage Dividers

Series 1776-X

Input Voltage Dividers for multimeters and other instruments

Series 1776 – ceramic-protected X Precision Decade Voltage Divider; 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 uses the special EBG METOXFILM.

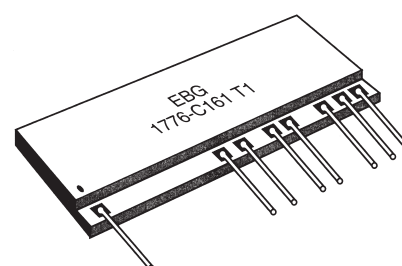
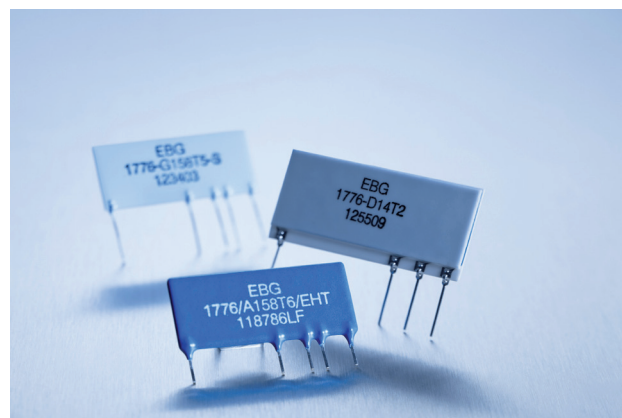
General Characteristics

- 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. For special requirements, please ask your EBG representative or directly at EBG.

Specifications

- Ratio tolerance: 0.05% to 0.25%
- Absolute tolerance: $\pm 0.1\%$ to $\pm 0.5\%$
- Ratio temperature coefficient: 10 ppm/ $^{\circ}\text{C}$ to 50 ppm/ $^{\circ}\text{C}$
- Absolute temperature coefficient: ± 25 ppm/ $^{\circ}\text{C}$ to ± 50 ppm/ $^{\circ}\text{C}$
- Voltage coefficient: < 0.05 ppm/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 10 M Ω



Model no.	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			
	R1 Ω	R2 Ω	R3 Ω	R4 Ω	R5 Ω								Load life	Shelf life	Over-Voltage	
B169 T3-X	9M	900K	90K	9K	900	1	1200	0.1	0.1	30	10	0.1	0.02	0.01	0.01	C
B168 T3-X	9M	900K	90K	9K	1K	1	1200	0.1	0.1	30	10	0.1	0.02	0.01	0.01	C
E167 T1-X	9M	900K	90K	9K	900	2	1200	0.25	0.25	50	50	0.5	0.04	0.02	0.04	C
B167 T1-X	9M	900K	90K	9K	900	2	1200	0.1	0.1	50	50	0.5	0.04	0.02	0.04	C
E166 T1-X	9M	900K	90K	9K	1K	2	1200	0.25	0.25	50	50	0.5	0.04	0.02	0.04	C
B166 T1-X	9M	900K	90K	9K	1K	2	1200	0.1	0.1	50	50	0.5	0.04	0.02	0.04	C
E16 T1-X	9M	900K	90K	9K	900	3	1200	0.25	0.25	50	50	0.3	0.04	0.02	0.04	C
B16 T1-X	9M	900K	90K	9K	900	3	1200	0.1	0.1	50	50	0.2	0.02	0.01	0.02	C
A16 T1-X	9M	900K	90K	9K	900	3	1200	0.1	0.05	50	50	0.2	0.02	0.01	0.02	C
E161 T1-X	9M	900K	90K	9K	1K	3	1200	0.25	0.25	50	50	0.3	0.04	0.02	0.04	C
D161 T1-X	9M	900K	90K	9K	1K	3	1200	0.25	0.1	50	50	0.2	0.02	0.01	0.02	C
C161 T1-X	9M	900K	90K	9K	1K	3	1200	0.25	0.05	50	50	0.2	0.02	0.01	0.02	C
F37 T3-X	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-X	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-X	9M	900K	90K	10K	N/A	6	1200	0.25	0.05	30	10	0.02	0.02	0.01	0.01	
D15 T3-X	9M	900K	90K	10K	N/A	6	1200	0.25	0.1	30	10	0.02	0.02	0.01	0.01	
D14 T2-X	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-X	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-X	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-X	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-X	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-X	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-X	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-X	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-X	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-X	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-X	900K	90K	9K	1K	N/A	9	750	0.1	0.1	25	15	0.3	0.02	0.01	0.02	C
A158 T6-X	900K	90K	9K	1K	N/A	9	750	0.1	0.05	25	15	0.3	0.02	0.01	0.02	C

for „X“ in model no., please select (surface finish): **B** - printed silicone, **E** - epoxy encapsulation, **C** - ceramic cover plate (if available)

The above spec. sheet features our standard products. For further options, please contact our local EBG representative or contact us directly. For updated information, please visit our website!