

Precision Decade Voltage Dividers

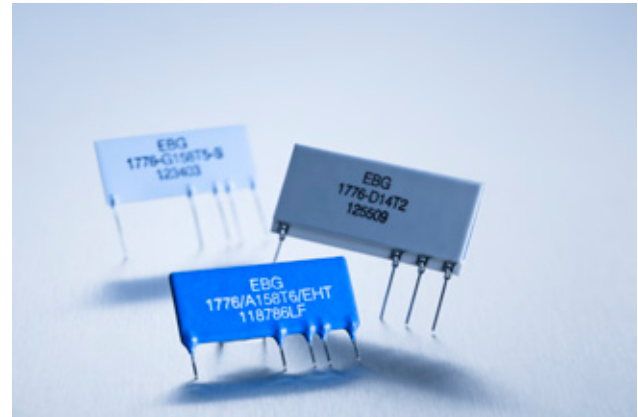
Series 1776-X

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

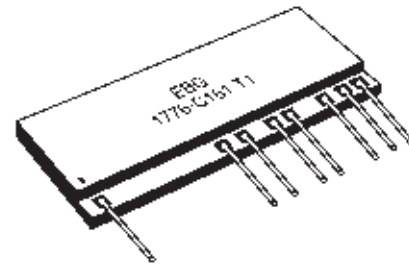
- Compact precision resistor networks
- Easy-to-install package
- Absolute tolerances to ± 0.1 , ± 0.25 and $\pm 0.5\%$
- Relative tolerances to 0.05, 0.10 and 0.25%
- Ratio temperature coefficients from 10 to 50 ppm/ $^{\circ}\text{C}$
- High stability under load $< 0.02\%$
- Excellent shelf life: $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



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. 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), **S** - silicone conformal

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!