Type THV Precision High Voltage Divider Networks

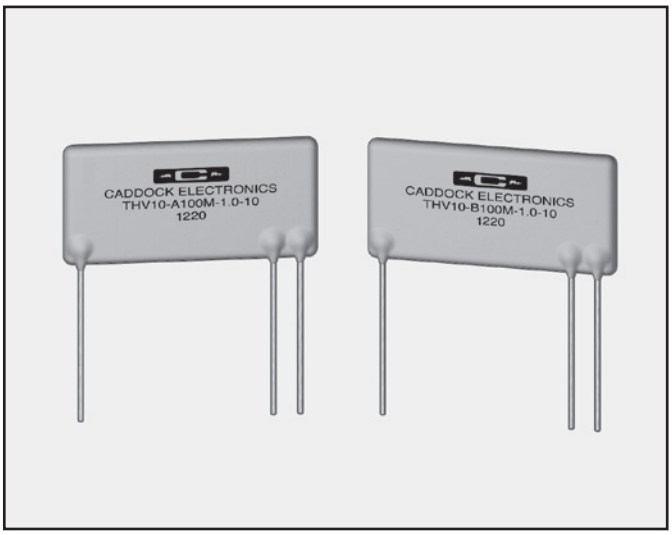
Ratio TC to 10 ppm/°C, Ratio Tolerance to ±0.25%, Voltage Ratings of 10 KV or 15 KV

The Type THV Precision High Voltage Divider Networks introduce Caddock's advanced high voltage resistor technology which doubles the allowable working voltage over the length of the high voltage section. This technology combines Caddock's Tetrinox® resistance films with a patented laser-generated V-Notch Geometry which optimizes the voltage gradient over the length of the resistance pattern.

Type THV networks provide tighter ratio temperature coefficients and tighter ratio tolerances than have previously been available in standard high voltage divider products.

- Ratio Temperature Coefficients of 10 ppm/°C or 25 ppm/°C from -55°C to +125°C.
- Ratio Tolerances of ±0.25%, ±0.5%, or ±1.0% at Rated Voltage.
- Voltage Ratings of 10 KVDC or 15 KVDC
- Standard Voltage Division Ratios of 1,000:1 or 100:1, with custom ratios available.

These specifications can provide important improvements in performance in many types of advanced electronic systems, including, TWT power supplies, radar systems, X-ray systems, analytical equipment, and high resolution CRT displays.



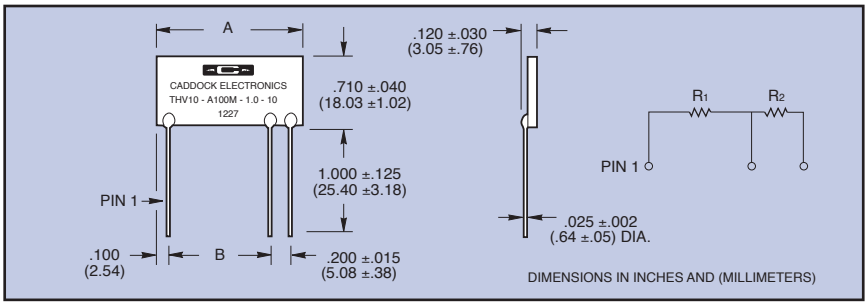
For complete information on price and delivery of both evaluation and production quantities, contact Caddock Applications Engineering.

Standard Type THV Precision High Voltage Divider Networks

Model No.	Voltage Rating	Ratio Code Letter	Voltage Division	Resistance			Dimensions inches (mm)	
				R_1	R_2	Total	A	B
THV10	10 KVDC	A	1,000:1	99.9 Meg	100 K	100 Meg	1.500 ±.030 (38.10 ±.76)	1.100 ±.015 (27.94 ±.38)
		B	100:1	99 Meg	1 Meg	100 Meg		
THV15	15 KVDC	A	1,000:1	149.85 Meg	150 K	150 Meg	2.050 ±.030 (52.07 ±.76)	1.650 ±.015 (41.91 ±.38)
		B	100:1	148.5 Meg	1.5 Meg	150 Meg		

Ordering Information: THV10 - A 100M - 1.0 - 10

- **Model Number:**
- **Ratio Code Letter:**
- **Total Resistance Value of the Divider:**
- **Ratio Temperature Coefficient from -55°C to +125°C:** -25 = 25 ppm/°C -10 = 10 ppm/°C
- **Standard Ratio Tolerance at Rated Voltage:** -1.0 = 1.0% -0.25 = 0.25% -0.5 = 0.5%



Precision High Voltage Dividers: For assistance in specifying precision high voltage dividers for your application please contact Caddock Applications Engineering. We can offer high voltage divider solutions based on the combination of catalog high voltage resistors, or by using our well established capability to provide more precision in a Matched Resistor Set. Depending on the performance you require, a precision high voltage divider solution can be formed using Caddock Type USG and USF resistors, or Caddock Type TG and TK resistors, or a combination of Type MG resistors.

Specifications:

Ratio Tolerance: See ordering information.

Absolute Tolerance: ±1.0% for all resistors.

Ratio Temperature Coefficient: See ordering information.

Absolute Temperature Coefficient: 30 ppm/°C referenced to +25°C, ΔR taken at -55°C and +125°C.

Voltage Rating: Rated voltage applied to R_1 and R_2 in series.

Load Life: Ratio change with rated voltage applied for 1,000 hours at +125°C, 0.4% max.

Overvoltage: 1.5 times rated voltage for 5 seconds, ratio change 0.5% max.

Thermal Shock: Mil-Std-202, Method 107, Cond. C, ratio change 0.25% max.

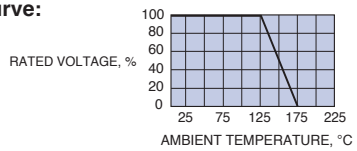
Moisture Resistance: Mil-Std-202, Method 106, ratio change 0.5% max.

Solderable Leads

Encapsulation: High Temperature Silicone Conformal with Dielectric Withstanding Voltage of 750 volts.

Insulation Resistance: 10,000 Megohms, min.

Derating Curve:



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