Type THV Precision High Voltage Divider Networks

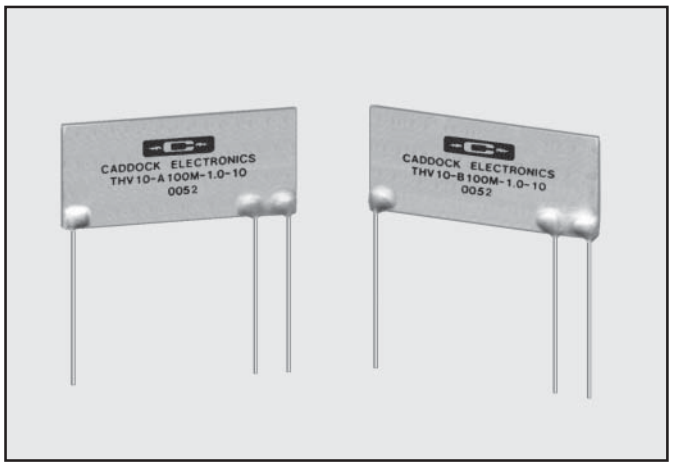
Ratio TC to 10 ppm/°C, Ratio Tolerance to ±0.25%, Voltage Ratings of 10 KV, 15 KV or 20 KVDC

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%, ±1.0% or ±2.0% at Rated Voltage.
- Voltage Ratings of 10 KVDC, 15 KVDC or 20 KVDC at +125°C.
- 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 our Sales Office.

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		
THV20	20 KVDC	A	1,000:1	199.8 Meg	200 K	200 Meg	2.600 ±.030 (66.04 ±.76)	2.200 ±.015 (55.88 ±.38)
		B	100:1	198 Meg	2 Meg	200 Meg		

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

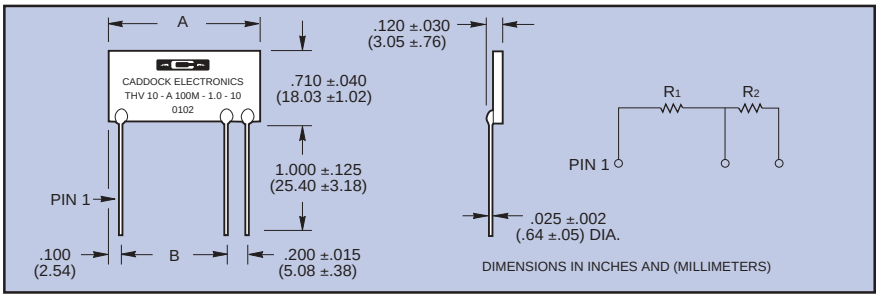
Model Number: THV10

Ratio Code Letter: A

Total Resistance Value of the Divider: 100M

Ratio Temperature Coefficient from -55°C to +125°C:
-25 = 25 ppm/°C -10 = 10 ppm/°C

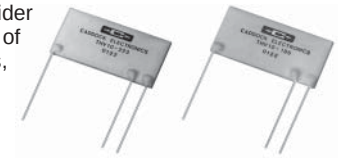
Standard Ratio Tolerance at Rated Voltage:
-2.0 = 2.0% -0.5 = 0.5%
-1.0 = 1.0% -0.25 = 0.25%



Custom Type THV Precision High Voltage Divider Networks

Custom Type THV Precision High Voltage Divider Networks can be produced with a broad range of resistance values, voltage ratios, voltage ratings, ratio tolerances and ratio temperature coefficients.

Contact our Applications Engineering about your custom high voltage divider requirement.



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.

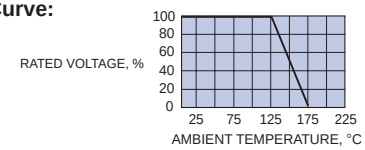
Moisture Resistance: Mil-Std-202, Method 106, ratio change 0.5% max.

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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