

# Precision High Voltage Divider

## Series HVT

EBG introduces the new series of High Voltage Dividers called HVT. Available in 6 different sizes from 5 KV to 20 KV Voltage rating. In these highly reliable components EBG combines its state of the art high voltage technology with the unique METOXFILM stability.

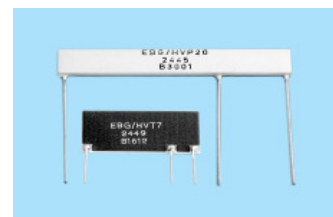
The HVT components provide tight ratio tolerance, TCR tracking and custom designed values.

- Voltage ratings from 5KV to 20KV
- Ratio TCR 25 ppm/°C (10 ppm/°C upon request)
- Typical Voltage Coefficient 0.3 ppm/V
- Voltage Division:  
1,000:1 or 100:1 (others upon request)

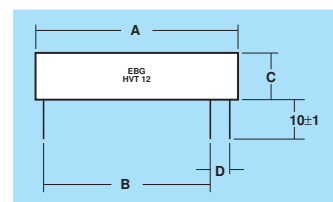
$$\text{Ratio} = \frac{R1+R2}{R2}$$

### Specifications

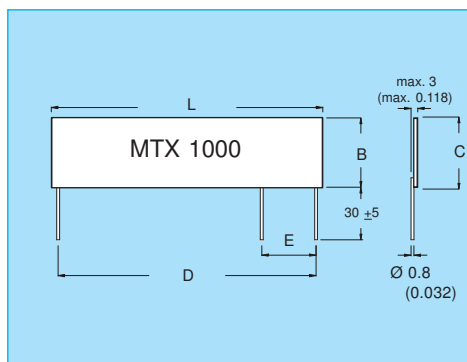
- Absolute Tolerance: ±1.0% for all resistors
- Overvoltage: 1.5 times rated voltage for 5 seconds ΔR ratio 0.5% max.
- abs TCR ± 100ppm/°C TCR measured between +25°C and +85°C, referenced to +25°C
- Load Life: Ratio ΔR with rated voltage applied for 1,000 hours 0.4% max.
- Moisture Resistance: Mil-Std-202, Method 106, ratio ΔR 0.5% max.
- Thermal Shock: Mil-Std-202, Method 107, Cond. C, ratio ΔR 0.25% max.
- Encapsulation: Silicon conformal coating with Dielect. withstanding Voltage of 1,000V on HVT 11, 16, 21. HVT 5, 7 and 12 have a printed silicon coating
- Other Resistance Values on request. Please do not hesitate to contact our local representative.
- Lead Material: O.F.H.C. Copper tin plated: diam. 0.60 mm
- operating temp.: -55°C to 155°C



Type	Voltage [KV]	Resist. [MΩ]	Pmax	Dim. in mm ±0.4 (inches ±0.016)			
				A	B	C	D
HVT 5	5 KV	100	0.3	25.4	18.0	7.62	5.08
HVT 7	7 KV	100	0.5	25.4	18.0	12.7	5.08
HVT 11	10 KV	100	1.0	38.1	28.0	26.4	5.08
HVT 12	12 KV	200	1.0	52.0	33.0	12.7	15.24
HVT 16	15 KV	200	1.5	2.047	1.299	0.500	0.600
HVT 21	20 KV	200	2.0	52.0	42.0	18.0	5.08
				2.047	1.654	1.00	0.200



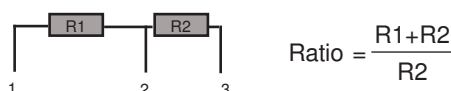
## Series MTX 1000



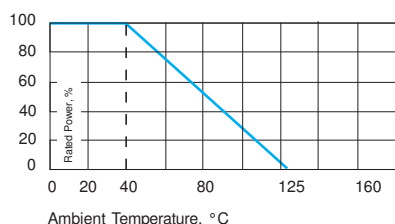
### Specifications

Dimensions (mm)

Type	PWatt	UkvDC	L	B	C	D	E
1000.2	0.5	8	26	8	9.1	22.9	5.08
1000.3	1.2	15	38.5	13	14.2	35.6	7.62
1000.4	1.8	24	51.5	15.5	16.6	48.3	10.16
1000.5	2.4	32	77.5	15.5	16.6	73.4	10.16



$$\text{Ratio} = \frac{R1+R2}{R2}$$



- Operating Temperature: -55 to +125°C
- Abs. Temperature Coefficient: 50 to 15ppm/°C depending on ohmic value
- Ratio Temperature Coefficient: 15 to 5ppm/°C depending on ohmic value
- Absolute Tolerance: ±1% to ±0.1% depending on ohmic value
- Ratio Tolerance: 1% to 0.1% depending on ohmic value
- Insulation Resistance: > 10,000 Mohm (500 Volts, 25°C, 75% relative humidity)
- Dielectric Strength: > 1000 Volts (25°C, 75% relative humidity)
- Thermal Shock: ΔR/R 0.2% max
- Overload: ΔR/R 0.25% max 1.5 x Pnom, 5 sec (do not exceed 1.5 x Vmax)
- Moisture Resistance: ΔR/R 0.25% max
- Load Life: ΔR/R 0.15% max (1000 hours at rated power)
- Encapsulation: Conformal coating (U) or glass coating (G)
- Lead Material: Tinned copper

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!