

# Precision High-Voltage Divider

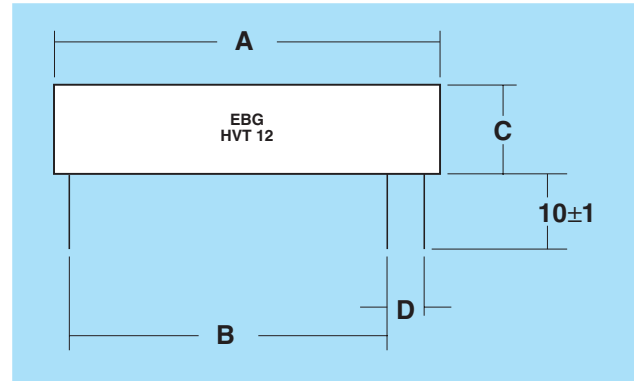
## Series HVT

The new HVT series of high-voltage dividers is available in six 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 5 KV to 20 KV
- Ratio TCR 25 ppm/°C (10 ppm/°C upon request)
- Typical voltage coefficient 0.4 ppm/V
- Voltage division: 1,000:1 or 100:1 (others upon request)

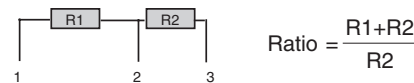
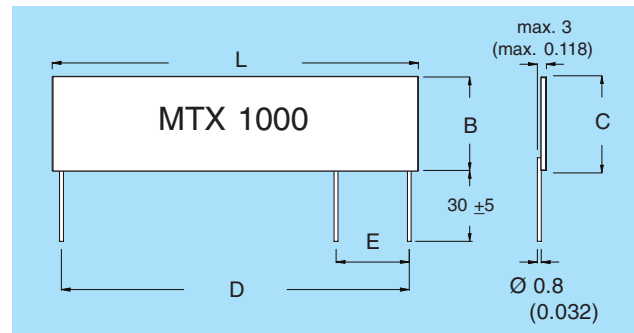
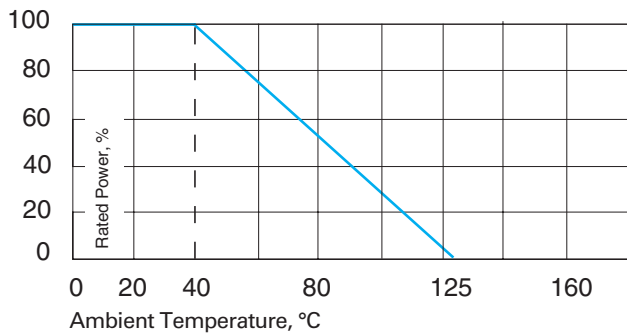
### Specifications

- Absolute tolerance: ±1.0% for all resistors
- Overvoltage: 1.5 times rated voltage for 5 seconds ΔR ratio 0.5% max.
- Abs. TCR: ± 100 ppm/°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: silicone conformal with dielectric withstanding voltage of 1,000 V on HVT 11, 16, 21. HVT 5, 7, and 12 have a printed silicone coating
- Other resistance values upon request.  
Please do not hesitate to contact our local representative.
- Lead material: OFHC copper, tin-plated, 0.60 mm
- Operating temperature: -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	25.40 1.00	18.00 0.709	7.62 0.300	5.08 0.200
HVT 7	7 KV	100	0.5	25.40 1.00	18.00 0.709	12.70 0.500	5.08 0.200
HVT 11	10 KV	100	1.0	38.10 1.500	28.00 1.102	26.40 1.039	5.08 0.200
HVT 12	12 KV	200	1.0	52.00 2.047	33.00 1.299	12.70 0.500	15.24 0.600
HVT 16	15 KV	200	1.5	52.00 2.047	42.00 1.654	18.00 0.709	5.08 0.200
HVT 21	20 KV	200	2.0	52.00 2.047	42.00 1.654	25.40 1.00	5.08 0.200

## Series MTX 1000



### Specifications

- |                                |   |
|--------------------------------|---|
| Operating temperature:         | -55 to +125°C   |
| Abs. temperature coefficient:  | 50 to 15 ppm/°C depending on ohmic value                        |
| Ratio temperature coefficient: | 15 to 5 ppm/°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 MΩ (500 V, 25°C, 75% relative humidity)                 |
| Dielectric strength:           | >1000 V (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., 1,000 hours at rated power                     |
| Encapsulation:                 | silicone conformal (U), glass coating (G), or polyimide coating |
| Lead material:                 | tinned copper   |

### 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

\* for glass coating and polyimide coating, when used in open air, please use max. voltage x 0.6

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!