

# Series FBX / FSX

TC of  $\pm 80$  ppm/ $^{\circ}\text{C}$  combined with precision tolerances and wide ohmic range

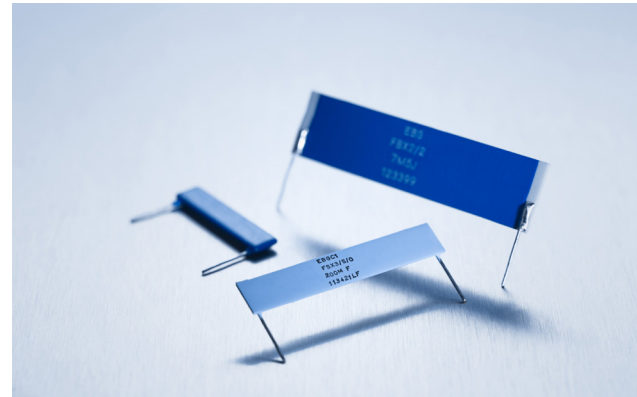
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Low-cost, high-voltage resistors that provide high-density packaging in large volume applications.

## Features

- up to 29 kV operating voltage
- Non-Inductive design
- ROHS compliant
- Standard contact lead diameter 0.6 mm. Others available on special request or no lead version for SMD mounting
- On request custom designed version available, max. ceramic size substrates 101.6 mm (4 inch)
- Voltages up to 35% higher than the values listed – “S”-Version



## Technical Specifications

<b>Resistance value</b>	200 $\Omega$ $\leq$ 2 G $\Omega$ higher values on special request
<b>Resistance tolerance</b>	$\pm 0.5$ % to $\pm 10$ % down to $\pm 0.1$ % on special request for limited ohmic values
<b>Temperature coefficient</b>	$\leq 100$ M $\Omega$ : $\pm 80$ ppm/ $^{\circ}\text{C}$ standard $> 100$ M $\Omega$ : $\pm 150$ ppm/ $^{\circ}\text{C}$ standard from $-5^{\circ}\text{C}$ to $+105^{\circ}\text{C}$ referenced to $+25^{\circ}\text{C}$ ; down to 15ppm/ $^{\circ}\text{C}$ on special request for limited ohmic value
<b>Max. operating temperature</b>	FBX/FSX: $-55^{\circ}\text{C}$ to $+225^{\circ}\text{C}$
<b>Voltage coefficient</b>	see VCR-chart below, for FBX-6/5 ask for details
<b>Weight</b>	depending on model no. (ask for details)

### Different coatings available:

- **Series FBX:** with surface silicone print as an inexpensive alternative
- **Series FSX:** silicone conformal for high-temperature operations ( $225^{\circ}\text{C}$ )

**Other coating options such as glass, 2xpolyimide, UV cured, on special request**

## Model Specifications

### Series FBX with Surface Silicone Print

Model no.	Wattage at $+25^{\circ}\text{C}$	Max. continuous operating voltage	Dimensions in millimeters (inches)		
			A $\pm 0.50$ (max.) $\pm 0.02$	B $\pm 0.50$ (max.) $\pm 0.02$	C $\pm 0.50$ $\pm 0.02$
FBX 1/2	0.50	3,000*	12.90 (0.51)	3.40 (0.13)	10.20 (0.40)
FBX 5/5	0.65	4,500*	17.15 (0.68)	3.40 (0.13)	15.24 (0.60)
FBX 6/5	1.20	5,000*	20.00 (0.98)	5.08 (0.20)	17.78 (0.70)
FBX 8/5	1.60	6,000*	25.60 (1.01)	5.30 (0.21)	22.90 (0.90)
FBX 3	3.00	9,000*	38.30 (1.51)	6.60 (0.26)	35.50 (1.40)
FBX 4	4.00	11,500*	51.00 (2.01)	6.60 (0.26)	48.20 (1.90)
FBX 2/2	5.00	16,500*	51.00 (2.01)	12.90 (0.51)	48.20 (1.90)

\*when used in clean air

### Series FSX with Conformal Silicone Protection

Model no.	Wattage at $+25^{\circ}\text{C}$	Max. continuous operating voltage	Dimensions in millimeters (inches)		
			A $\pm 1.00$ (max.) $\pm 0.04$	B $\pm 1.00$ (max.) $\pm 0.04$	C $\pm 0.50$ $\pm 0.02$
FSX 1/2	0.50	4,000	13.60 (0.54)	4.50 (0.18)	10.20 (0.40)
FSX 5/5	0.65	6,000	17.85 (0.70)	4.50 (0.18)	15.24 (0.60)
FSX 8/5	1.60	8,000	25.90 (1.02)	6.30 (0.25)	22.90 (0.90)
FSX 3	3.00	12,000	38.70 (1.52)	7.50 (0.30)	35.50 (1.40)
FSX 4	4.00	15,000	51.30 (2.02)	7.50 (0.30)	48.20 (1.90)
FSX 2/2	5.00	22,000	51.30 (2.02)	14.20 (0.56)	48.20 (1.90)

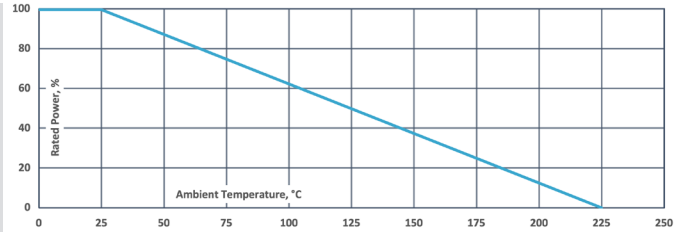
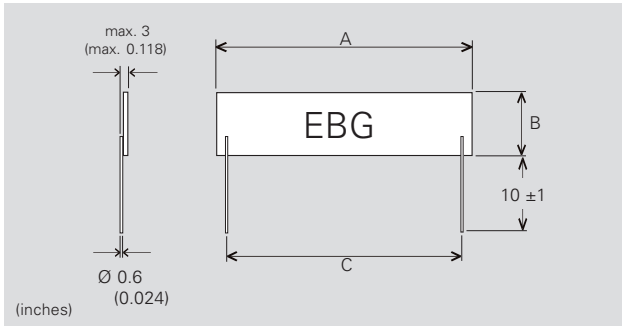
The above spec. sheet features our standard products. For further options please contact our local EBG representative or contact us directly.

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## How to make a request

Model no.\_Ohmic value\_Tolerance\_TCR

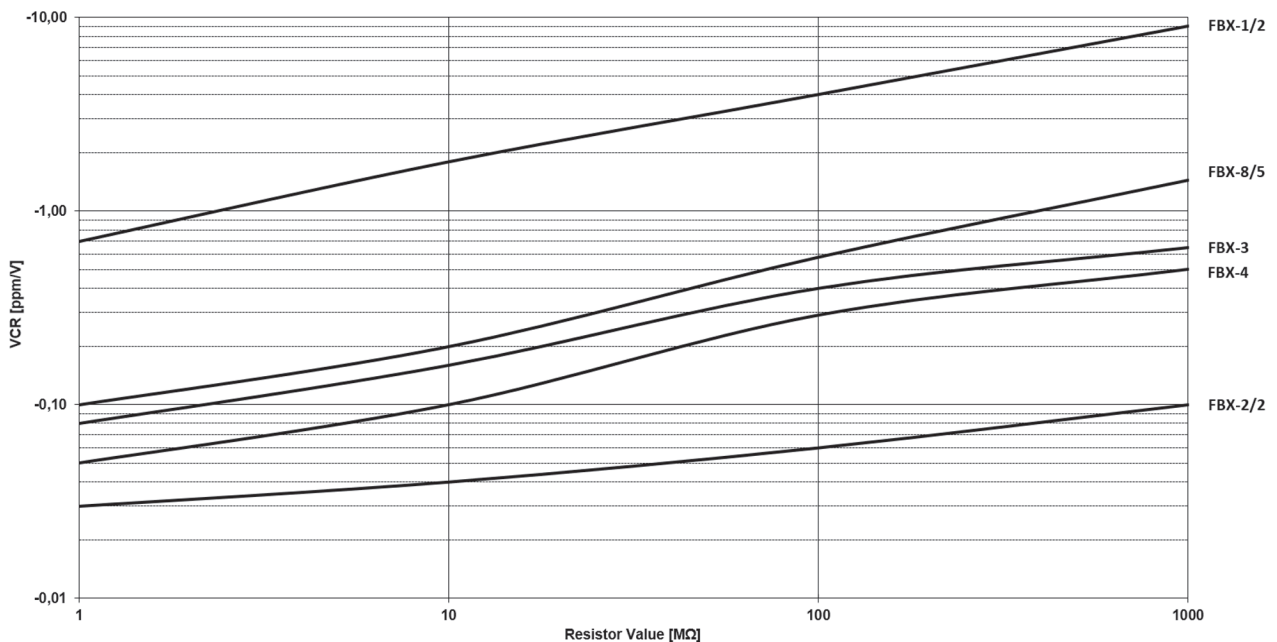
For example:

FBX-4 300K 1% 80ppm or FSX-8/5 10M 1% 25ppm

Example for higher voltage:

FSX-8/5-S 33M 1% 50ppm

## Typical Voltage Coefficient for FBX series (in ppm per volt)



Example:

FBX-2/2 with 100 MΩ has a typical voltage coefficient of -0.06 ppm/V.

# Disclaimer



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