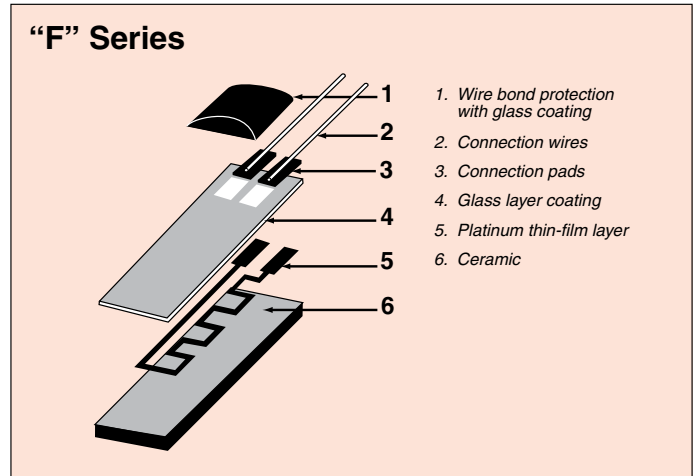


OMEGAFILM® RTD Elements

Flat Profile Thin Film Platinum

- ✓ Sold in Packs of 100
- ✓ Flat, Small Profile
- ✓ Specification DIN EN 60751 (According to IEC 751)
- ✓ Temperature Range -70 to 500°C (-94 to 932°F)
- ✓ Temperature Coefficient $\alpha = 0.00385$
- ✓ 100, 500 and 1000 Ω Configurations
- ✓ Class A, B and 1/3 B Tolerances
- ✓ Long Term Stability Maximum Ro-Drift 0.04% After 1000 Hours at 500°C
- ✓ Vibration Resistance at Least 40 g Acceleration at 10 to 2000 Hz
- ✓ Shock Resistance at 100 g Acceleration with 8 ms Half Sine Wave
- ✓ Insulation Resistance >10M Ω at 20°C: >1M Ω at 500°C
- ✓ Self Heating 0.4 K/mW at 0°C
- ✓ Response Time Water Current ($v=0.4$ m/s) $t_{0.5} = 0.2$ s; $t_{0.9} = 0.4$ s Air Stream ($v = 1$ m/s) $t_{0.5} = 4.0$ s; $t_{0.9} = 12.0$ s
- ✓ Platinum Clad Nickel Wire Leads 10 L x 0.2 mm D (0.39 x 0.008")



Tolerance/TCR (Alpha)

Class	Tolerance (°C)	Tolerance of Resistance at 0°C (Ω)	TCR ($\Omega/\Omega/^\circ\text{C}$)
1/3B	$\pm(0.1 + 0.0017t)$	± 0.04	0.003851 ± 0.000004
A	$\pm(0.15 + 0.0025t)$	± 0.06	0.003851 ± 0.000005
B	$\pm(0.3 + 0.0005t)$	± 0.12	0.003851 ± 0.000012

To Order				
Model Number	Dimensions: mm (1 mm = 0.03937")	Size (mm) W x L x H	Nominal Resistance Ω	Temperature Tolerance
F2222-100-B-100		2.2 x 2.2 x 0.8	100	Class B (-70 to 500°C)
F2222-100-A-100		2.2 x 2.2 x 0.8	100	Class A (-30 to 350°C)
F2222-100-1/3B-100		2.2 x 2.2 x 0.8	100	Class 1/3B (0 to 100°C)
F2222-1000-100		2.2 x 2.2 x 0.8	1000	Class B (-70 to 500°C)
F2222-1000-A-100		2.2 x 2.2 x 0.8	1000	Class A (-30 to 350°C)
F2222-1000-1/3B-100		2.2 x 2.2 x 0.8	1000	Class 1/3B (0 to 100°C)
F2010-100-B-100		2.0 x 10 x 0.8	100	Class B (-70 to 500°C)
F2010-100-A-100		2.0 x 10 x 0.8	100	Class A (-30 to 350°C)
F2010-100-1/3B-100		2.0 x 10 x 0.8	100	Class 1/3B (0 to 100°C)
F2010-500-100		2.0 x 10 x 0.8	500	Class B (-70 to 500°C)
F2010-1000-100		2.0 x 10 x 0.8	500	Class A (-30 to 350°C)
F2010-1000-A-100		2.0 x 10 x 0.8	1000	Class B (-70 to 500°C)
F2010-1000-1/3B-100	2.0 x 10 x 0.8	1000	Class A (-30 to 350°C)	
F2040-100-B-100		4.0 x 5.0 x 0.8	100	Class B (-70 to 500°C)
F2040-100-A-100		4.0 x 5.0 x 0.8	100	Class A (-30 to 350°C)
F2040-100-1/3B-100		4.0 x 5.0 x 0.8	100	Class 1/3B (0 to 100°C)
F2040-500-B-100		4.0 x 5.0 x 0.8	500	Class B (-70 to 500°C)
F2040-500-A-100		4.0 x 5.0 x 0.8	500	Class B (-70 to 500°C)
F2040-1000-B-100		4.0 x 5.0 x 0.8	1000	Class B (-70 to 500°C)
F2040-1000-A-100		4.0 x 5.0 x 0.8	1000	Class A (-30 to 350°C)
F2040-1000-1/3B-100		4.0 x 5.0 x 0.8	100	Class 1/3B (0 to 100°C)
F1540-100-B-100			1.5 x 4.0 x 0.8	100
F1540-100-A-100	1.5 x 4.0 x 0.8		100	Class A (-30 to 350°C)
F1540-100-1/3B-100	1.5 x 4.0 x 0.8		100	Class 1/3B (0 to 100°C)

Due to the self heating error by the measuring conditions, the measuring current should be limited to a maximum value. We recommend 100 Ω maximum 1 mA; 500 Ω 0.7 mA; 1000 Ω maximum 0.3 mA.

Ordering Example: F2222-100-B-100, 100 pieces of 2.2 x 2.2 mm, 100 Ω , Class B tolerance thin film RTD element.