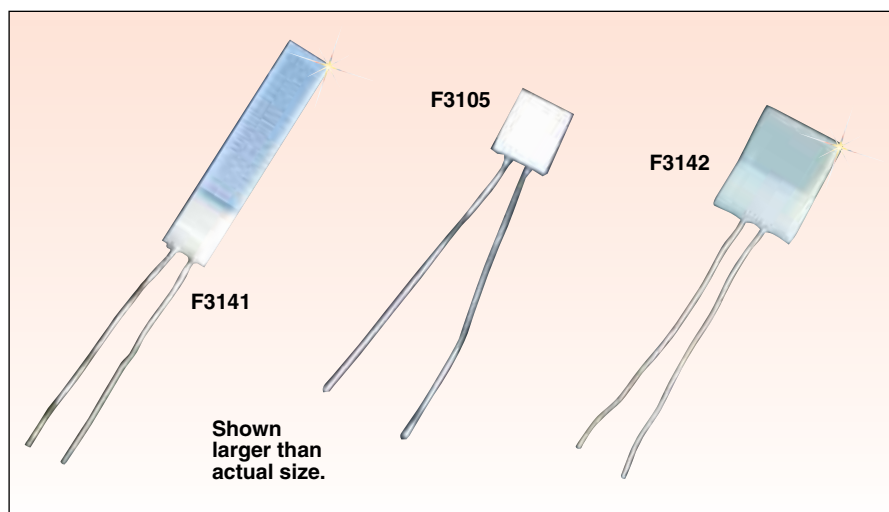


# Thin Film

## DIN Class “A” RTD Elements

- ✓ DIN Class “A” Accuracy
- ✓ Various Sizes Available
- ✓ Resistance Range from 100 to 1000  $\Omega$  at 0°C

**Series F:** Series F elements are small, flat, thin film elements with 0.2 mm (0.008") diameter by 10 mm (0.4") long lead wires. They can be used at temperatures between -50 and 500°C (-58 to 432°F) however, Class A accuracy is assured between -30 to 300°C (-22 to 572°F). These elements are available in 100.00  $\pm$  0.06, 500.00  $\pm$  0.30, and 1000.00  $\pm$  0.60  $\Omega$  at 0°C. Their resistance vs. temperature characteristics conform to IEC60751, and they have a temperature coefficient of resistance between 0 and 100°C of 0.00385  $\Omega/\Omega/^{\circ}\text{C}$ . See technical reference section online for a resistance vs. temperature curve and equations.



NEWPORT® thin film RTDs can be used as is with various controllers and instruments, or in an unlimited number of housings and package styles to meet user needs. Speak to one of our Applications Engineers for custom assemblies or application assistance.

### Discount Schedule

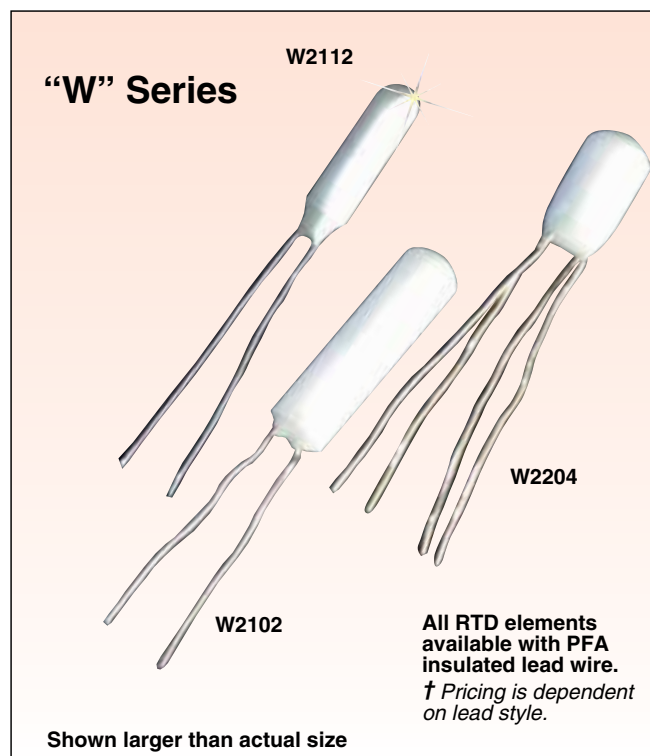
1 to 10 units . . . . .	Net
11 to 24 units . . . . .	10%
25 to 49 units . . . . .	15%
50 to 99 units . . . . .	20%
100 units and up . . . . .	25%

OMEGAFILM®—Platinum RTD Elements (Alpha = 0.00385)

To Order visit <a href="http://newportUS.com/W_F_WS81">newportUS.com/W_F_WS81</a> for Pricing and Details					
Series	10 mm Lead Length Dimensions in Millimeters (1 mm = 0.03937")	Single or Dual	Nominal Resistance ( $\Omega$ )	Temperature Model Range	Number
<b>F</b>		1 x 1 x 1 x	100 500 1000	↑ Max range: -50 to 500°C (-58 to 932°F) however, Class A tolerance applies to -30 to 300°C (-22 to 572°F) ↓	<b>F3101</b> <b>F3131</b> <b>F3141</b>
<b>F</b>		1 x 1 x	100 500		<b>F3102</b> <b>F3132</b>
<b>F</b>		1 x	1000		<b>F3142</b>
<b>F</b>		1 x	100		<b>F3105</b>
<b>F</b>		1 x	100		<b>F3107</b>

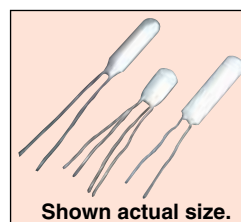
**Ordering Examples:** F3101, 1 x 100 platinum RTD element.  
F3105, 1 x 100 platinum RTD element.

# Thin Film RTD Elements



**Series W:** Series W elements are rugged, cylindrical platinum thin film ceramic elements that can be used at temperatures between -50 and 600°C (-58 to 1112°F). These elements have a 0.38 mm (0.015") diameter and gold-palladium leads approximately 10 mm (0.4") long which are strain relieved in the ceramic body. Series W elements include single and dual element configurations with resistances at 0°C of 100, 200, 400, 500, 1000, and 2000 Ω. The resistance vs. temperature characteristics of these elements conforms to IEC751, with a tolerance of ±0.1% at 0°C, placing their accuracy between the Class A and Class B requirements. The resistance vs. temperature table and calculation equations can be found in the technical reference section online.

OMEGAFILM® RTDs can be used as-is with various controllers and instruments, or packaged into an unlimited number of housings and package styles to meet your measurement and control needs.



## Discount Schedule

1 to 10 units . . . . .	Net
11 to 24 units . . . . .	10%
25 to 49 units . . . . .	15%
50 to 99 units . . . . .	20%
100 units and up . . . . .	25%

OMEGAFILM®—Platinum RTD Elements (Alpha = 0.00385)

To Order visit <a href="http://newportUS.com/W_F_WS81">newportUS.com/W_F_WS81</a> for Pricing and Details					
Series	15 mm Lead Length Dimensions in millimeters (1 mm = 0.03937")	Single or Dual	Nominal Resistance (Ω)	Temperature Range	Model Number
<b>W</b>		1	x	100	<b>W2102</b> <b>W2112</b> <b>W2132</b> <b>W2142</b> <b>W2152</b>
		1	x	200	
		1	x	500	
		1	x	1000	
		1	x	2000	
<b>W</b>		2	x	100	<b>W2202</b> <b>W2212</b> <b>W2222</b> <b>W2232</b> <b>W2242</b>
		2	x	200	
		2	x	400	
		2	x	500	
		2	x	1000	
<b>W</b>		1	x	100	<b>W2103</b>  <b>W2204</b>
		2	x	100	
<b>WS</b>		1	x	100	<b>WS81</b>

\* Length is 17 mm for 1000 and 2000 Ω elements.

Ordering Example: W2103, 1 x 100 Ω, 2 mm dia. platinum RTD element.