

# High Temperature TaNFilm® Chip Resistors

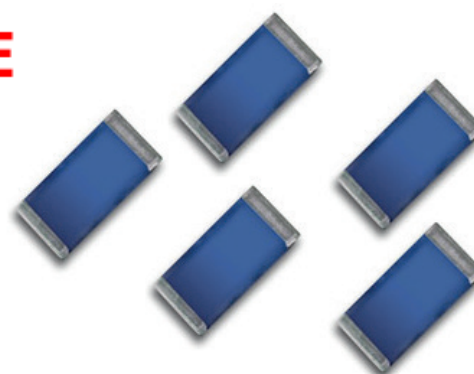


## PFC HT Series

**OBSOLETE**

### Features

- Available in industry standard 0603, 0805 and 1206 chip sizes
- Gold and 100% tin (Pb-free) terminations available
- Self-passivating TaNFilm® element
- Absolute TCR to  $\pm 25\text{ppm}/^\circ\text{C}$

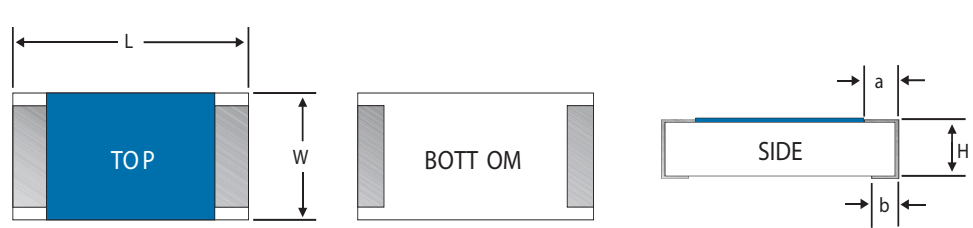


 All Pb-free parts comply with EU Directive 2011/65/EU amended by (EU) 2015/863 (RoHS3)

## Electrical Data

| Model   | Ohmic Range | Absolute TCR | Rated Power | Rated Voltage (not to exceed rated power) | Temperature Range | Termination                 | Substrate     |  |  |
|---------|-------------|--------------|-------------|---|-------------------|-----------------------------|---------------|--|--|
| W0603HT | 10Ω to 10KΩ | ±100ppm/°C   | 0.0625W     | 33.3V                                     | -55°C to 200°C    | Gold and 100% tin (Pb-free) | 99.5% Alumina |  |  |
|         | 25Ω to 10KΩ | ±50ppm/°C    |             |   |                   |                             |               |  |  |
|         | 50Ω to 10KΩ | ±25ppm/°C    |             |   |                   |                             |               |  |  |
| W0805HT | 10Ω to 20KΩ | ±100ppm/°C   | 0.100W      | 50V                                       |                   |                             |               |  |  |
|         | 25Ω to 20KΩ | ±50ppm/°C    |             |   |                   |                             |               |  |  |
|         | 50Ω to 20KΩ | ±25ppm/°C    |             |   |                   |                             |               |  |  |
| W1206HT | 5Ω to 85KΩ  | ±100ppm/°C   | 0.125W      | 100V                                      |                   |                             |               |  |  |
|         | 25Ω to 85KΩ | ±50ppm/°C    |             |   |                   |                             |               |  |  |
|         | 50Ω to 85KΩ | ±25ppm/°C    |             |   |                   |                             |               |  |  |

## Physical Data

|  |  |                                       |                                       |                                       |  |
|--|--|---------------------------------------|---------------------------------------|---------------------------------------|--|
|  | L                                      | W                                     | H                                     | a                                     | b                                      |
| W0603  | 0.063 $\pm$ 0.004<br>(1.6 $\pm$ 0.1)   | 0.031 $\pm$ 0.004<br>(0.79 $\pm$ 0.1) | 0.02 $\pm$ 0.004<br>(0.51 $\pm$ 0.1)  | 0.012 $\pm$ 0.005<br>(0.3 $\pm$ 0.13) | 0.015 $\pm$ 0.005<br>(0.38 $\pm$ 0.13) |
| W0805  | 0.081 $\pm$ 0.005<br>(2.06 $\pm$ 0.13) | 0.05 $\pm$ 0.005<br>(1.27 $\pm$ 0.13) | 0.02 $\pm$ 0.006<br>(0.51 $\pm$ 0.15) | 0.015 $\pm$ 0.008<br>(0.38 $\pm$ 0.2) | 0.016 $\pm$ 0.008<br>(0.41 $\pm$ 0.2)  |
| W1206  | 0.126 $\pm$ 0.006<br>(3.2 $\pm$ 0.15)  | 0.063 $\pm$ 0.005<br>(1.6 $\pm$ 0.13) | 0.024 $\pm$ 0.004<br>(0.61 $\pm$ 0.1) | 0.025 $\pm$ 0.01<br>(0.64 $\pm$ 0.25) | 0.025 $\pm$ 0.01<br>(0.64 $\pm$ 0.25)  |

### General Note

TT Electronics reserves the right to make changes in product specification without notice or liability.  
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BI Technologies IRC Welwyn

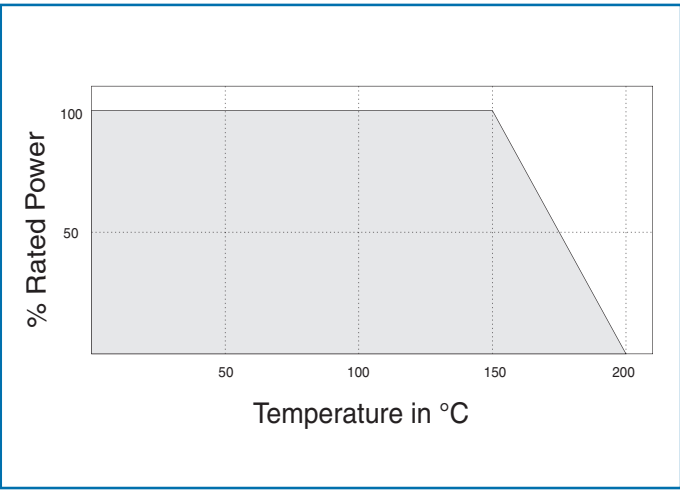
[www.ttelectronics.com/resistors](http://www.ttelectronics.com/resistors)

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Performance Data

| Environmental Test<br>MIL-PRF-55342       | Performance |         |
|---|-------------|---------|
|   | Typical     | Maximum |
| Thermal Shock                             | ±0.02%      | ±0.10%  |
| Short Time Overload                       | ±0.02%      | ±0.05%  |
| High Temperature Exposure                 | ±0.03%      | ±0.10%  |
| Effects of Solder                         | ±0.01%      | ±0.10%  |
| Moisture Resistance                       | ±0.03%      | ±0.10%  |
| Life<br>(1000 hours, 200°C, no load )     | ±0.8%       | ±1.0%   |
| Life<br>(1000 hours, 150°C, rated power ) | ±0.2%       | ±0.5%   |

Rated Power vs Temperature Data



Ordering Procedure

This product has two valid part numbers:

European (Welwyn) Part Number: W1206HT-01-1K0F (1206, 100ppm/°C, 1 kilohm ±1%, Au terminations)

|   |   |   |   |   |   |   |  |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|--|---|---|---|---|---|---|---|---|
| W | 1 | 2 | 0 | 6 | H | T |  | - | 0 | 1 | - | 1 | K | 0 | F |
| 1 | 2 | 3 | 4 | 5 | 6 |   |  |   |   |   |   |   |   |   |   |

| 1<br>Type | 2<br>Size | 3<br>Termination                                  | 4<br>TCR        | 5<br>Value  | 6<br>Tolerance | Packing   |           |
|-----------|-----------|---|-----------------|---|----------------|-----------|-----------|
| W=PFC     | 0603      | HT = High temp. with<br>Au terminations           | 03 = ±25ppm/°C  | E24 = 3/4 characters<br>E96 = 3/4 characters<br>R = ohms<br>K = kilohms | F = ±1%        | All sizes | 1000/reel |
|           | 0805      |   | 02 = ±50ppm/°C  |   | G = ±2%        |           |           |
|           | 1206      | HTLF = High temp.<br>with 100% Sn<br>terminations | 01 = ±100ppm/°C |   | J = ±5%        |           |           |

USA (IRC) Part Number: PFC-W1206HT-01-1001-F (1206, 100ppm/°C, 1 kilohm ±1%, Au terminations)

|   |   |   |   |   |   |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|--|---|---|---|---|---|---|---|---|---|---|
| P | F | C | - | W | 1 | 2 | 0 | 6 | H | T |  | - | 0 | 1 | - | 1 | 0 | 0 | 1 | - | F |
| 1 | 2 | 3 | 4 | 5 | 6 |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |

| 1<br>Family | 2<br>Model | 3<br>Termination                                  | 4<br>TCR        | 5<br>Value  | 6<br>Tolerance | Packing   |           |
|-------------|------------|---|-----------------|---|----------------|-----------|-----------|
| PFC         | W0603      | HT = High temp. with<br>Au terminations           | 03 = ±25ppm/°C  | 3 digits + multiplier<br>R = ohms for<br>values <100 ohms | F = ±1%        | All sizes | 1000/reel |
|             | W0805      |   | 02 = ±50ppm/°C  |   | G = ±2%        |           |           |
|             | W1206      | HTLF = High temp.<br>with 100% Sn<br>terminations | 01 = ±100ppm/°C |   | J = ±5%        |           |           |

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