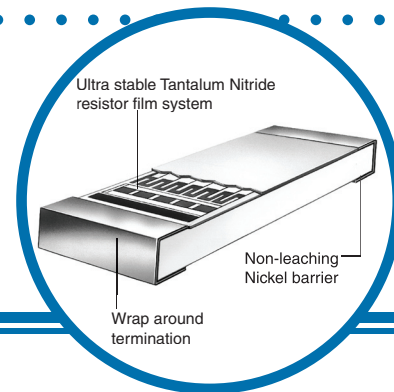# High Temperature
TaNFilm® Chip Resistors

TT electronics

IRC Advanced Film Division

PFC HT Series

- 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 ±25ppm/°C

Ultra stable Tantalum Nitride resistor film system

Non-leaching Nickel barrier

Wrap around termination

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

TOP   W

BOTTOM

a

SIDE   H

b

	L	W	H	a	b
W0603	0.063"±0.004"	0.031" ±0.004"	0.020" ±0.004"	0.012"±0.005"	0.015"±0.005"
W0805	0.081"±0.005"	0.050"±0.020"	0.020"±0.004"	0.016"±0.005"	0.016"±0.008"
W1206	0.126"±0.006"	0.063"±0.005"	0.024"±0.004"	0.025"±0.010"	0.025"±0.010"

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Performance Data

Environmental Test 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 (1000 hours, 200°C, no load)	±0.8%	±1.0%
Life (1000 hours, 150°C, rated power)	±0.2%	±0.5%

Rated Power vs Temperature Data

% Rated Power vs Temperature in °C
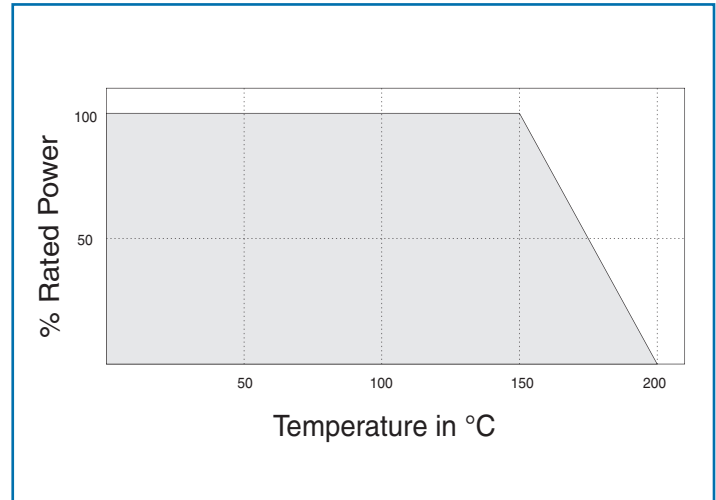
Ordering Data

| Prefix | PFC - W1206 HT - 01 - 1001 - F |

Prefix · PFC

Chip Size ·
W1206; W0805; W0603

Termination ·
HT = High temperature chip resistor with gold plated terminations
HTLF = High temperature chip resistor with 100% tin (Pb-free) terminations

TCR Code ·
01 = ±100ppm/°C; 02 = ±50ppm/°C; 03 = ±25ppm/°C

Resistance Code · · · · · · · · · · · · · · · · · ·
4-Digit resistance code. Ex: 1002 = 10KΩ; 50R0 = 50Ω

Tolerance Code · · · · · · · · · · · · · · · · · · ·
J = ±5%; G = ±2%; F = ±1%