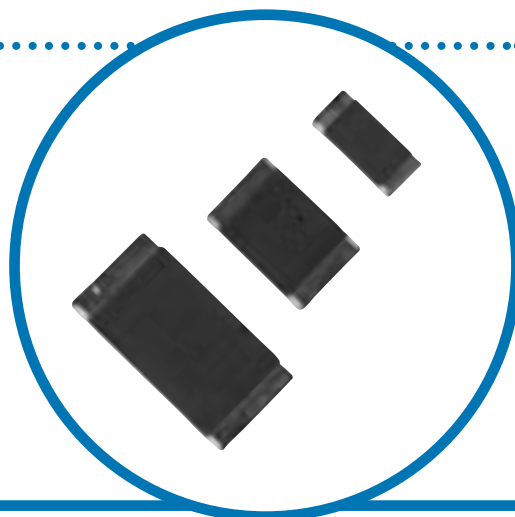


# TaNFilm® Precision Chip Resistors

## PFC Series

- Military parts available: MIL-PRF - 55342
- Passivated TaNFilm® element
- Wrap-around termination
- TCR to  $\pm 10$  ppm/°C
- Tolerance to  $\pm 0.02\%$
- Leach resistant nickel barrier termination



## Electrical Data

		W0603	W0805	W1206
Power Rating at 70°C	watts	0.1	0.25	0.33
Maximum Voltage Rating	volts	75	100	200
Operating Temperature Range	°C	-55°C to +150°C		
Noise	dB	Less than -25		
Substrate		High purity alumina		

## Manufacturing Capabilities

TCR (ppm/°C)	W0603		W0805		W1206	
	Ohmic Range	Available Tolerances	Ohmic Range	Available Tolerances	Ohmic Range	Available Tolerances
$\pm 100$	5 - 100K $\Omega$	J, G, F, D	5 - 267K $\Omega$	J, G, F, D	5 - 1M $\Omega$	J, G, F, D
$\pm 50$	5 - 100K $\Omega$	J, G, F, D, B	10 - 267K $\Omega$	J, G, F, D, B	10 - 1M $\Omega$	J, G, F, D, B
$\pm 25$	10 - 75K $\Omega$	J, G, F, D, B	10 - 267K $\Omega$	J, G, F, D, B	10 - 1M $\Omega$	J, G, F, D, B
	50 - 100K $\Omega$	J, G, F, D, B, A	50 - 267K $\Omega$	J, G, F, D, B, A	50 - 1M $\Omega$	J, G, F, D, B, A
$\pm 15$	N/A	N/A	201 - 267K $\Omega$	J, G, F, D, B, A, Q	201 - 1M $\Omega$	J, G, F, D, B, A, Q
			50 - 267K $\Omega$	J, G, F, D, B, A	50 - 1M $\Omega$	J, G, F, D, B, A
$\pm 10$	N/A	N/A	201 - 267K $\Omega$	J, G, F, D, B, A, Q	201 - 1M $\Omega$	J, G, F, D, B, A, Q
			100 - 100K $\Omega$	J, G, F, D, B, A	100 - 250K $\Omega$	J, G, F, D, B, A

The TaNFilm® PFC chip resistor series provides the high temperature and ultra stable performance of our Tantalum Nitride Resistive Film System in 1206, 0805 and 0603 sizes. The unique characteristics of the passivated Tantalum Nitride film insure long term life stability and superior moisture performance.

Specially selected materials and processes insure initial precision is maintained in the harshest surface mount soldering environment. Solder coated wrap-around terminations with leach-resistant nickel barriers insure high integrity solder connections. A MIL-PRF-55342 qualified version of this product is also available.

### General Note

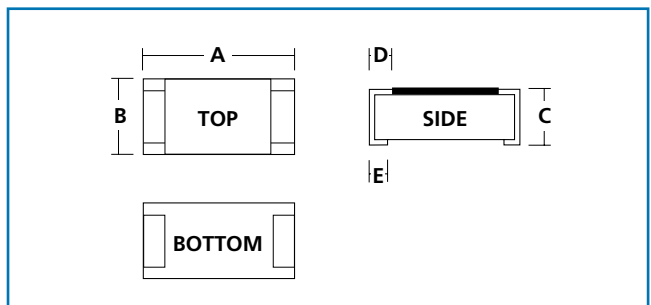
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## Environmental Performance

Environmental Test	Performance	
	Typical	Maximum
MIL-PRF-55342		
Thermal Shock	±0.02%	±0.10%
Low Temperature Operation	±0.01%	±0.05%
Short Time Overload	±0.01%	±0.05%
High Temperature Exposure	±0.03%	±0.10%
Effects of Solder	±0.01%	±0.10%
Moisture Resistance	±0.03%	±0.10%
Life	±0.03%	±0.10%

## Dimensions

Dimensions (Inches)					
Model	A	B	C	D	E
<b>W0603</b>	0.063±0.004	0.031±0.004	0.020±0.004	0.008±0.004	0.008±0.004
<b>W0805</b>	0.081±0.005	0.050±0.005	0.020±0.006	0.015±0.005	0.015±0.005
<b>W1206</b>	0.126±0.006	0.063±0.005	0.024±0.004	0.015±0.005	0.015±0.005



## Ordering Procedure

Example: PFC at 0805 size, 26.7 kilohms, 0.1% tolerance and 10ppm/°C TCR on a reel of up to 4000 pieces -

**W 0 8 0 5 R - 1 2 - 2 6 K 7 B I**

Type (W signifies PFC Series)

Size

TCR

R-12	10ppm/°C	R-02	50ppm/°C
R-11	15ppm/°C	R-01	100ppm/°C
R	25ppm/°C		

Value (use IEC62 code)

Tolerance (use IEC62 code)

Q	0.02%	F	1%
A	0.05%	G	2%
B	0.1%	J	5%
D	0.5%		

Packing

I	Tape	0603, 0805, 1206	Up to 4000/reel	Standard
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