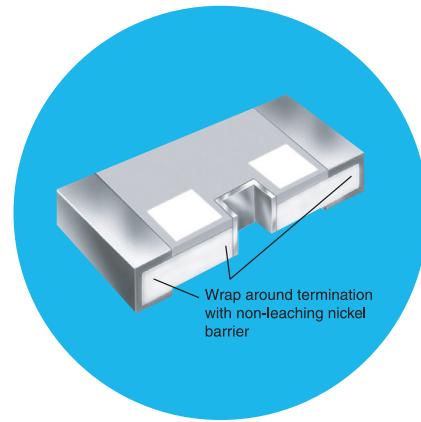


# TaNFilm® Precision Chip Voltage Divider

## PFC Divider Series

- Popular 1206 Chip Size
- 10Ω to 150KΩ per resistor
- Tested for COTS applications
- Superior alternative to matched sets
- Standard Sn/Pb and 100% tin (Pb-free) terminations available



All Pb-free parts comply with EU Directive 2011/65/EU (RoHS2)

This dual element, monolithic package offers the advantages of reducing component quantities and board space while increasing quality and reliability. The ratio tolerance can be specified down to 0.01%, which is much tighter than the 0.1% achievable from two individual 0.05% chip resistors. Similarly, the TCR tracking of 5 ppm/°C is far superior to the 50 ppm/°C tracking obtainable from two individual 25 ppm/°C chip resistors. The TaNfilm® Tantalum Nitride film system provides superior environmental performance while ensuring long term stability.

## Electrical Data

Characteristic	Each Resistor	Total Resistance
Resistance Range	10 - 150KΩ	200KΩ
Power Rating	125mW	250mW
Absolute TCR	to ±25ppm/°C*	
Tracking TCR	to ±5ppm/°C*	
Maximum Voltage Rating	100 volts	
Operating Temperature Range	-65°C to +150°C	
Noise	Less than -25 db	
Termination	60/40 Sn/Pb or 100% tin (Pb-free)	

\*Tighter Tolerance and Higher Resistance value available. Contact factory for more information

## Manufacturing Capability

Range of Lowest Resistor	Available Absolute Tolerances	Available Ratio Tolerances	Best Absolute TCR	Best Tracking TCR
10Ω - 24Ω	F	F D	±100ppm/°C	±50ppm/°C
25Ω - 50Ω	F D B	F D B	±50ppm/°C	±20ppm/°C
51Ω - 75Ω	F D B	F D B	±25ppm/°C	±10ppm/°C
76Ω - 999Ω	F D B	F D B A	±25ppm/°C	±5ppm/°C
1.0KΩ - 100KΩ	F D B A	F D B A Q T	±25ppm/°C	±5ppm/°C

### General Note

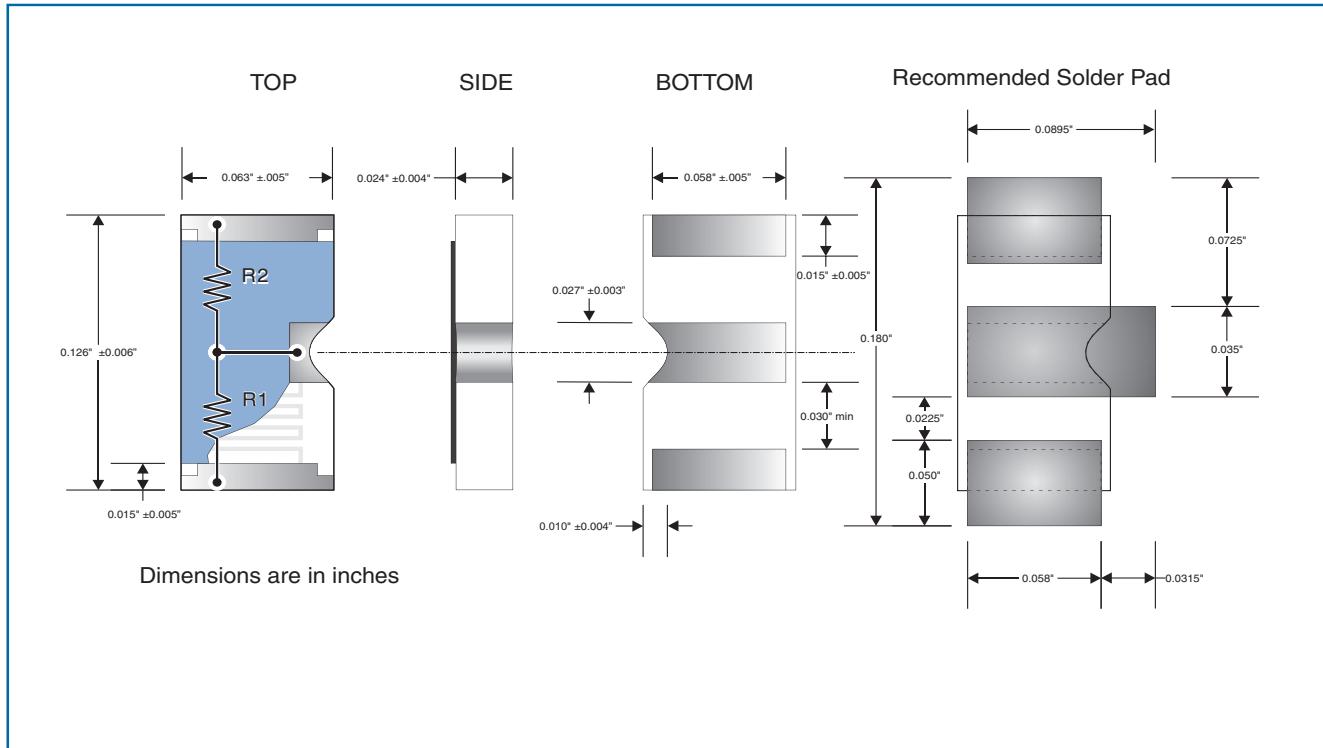
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All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

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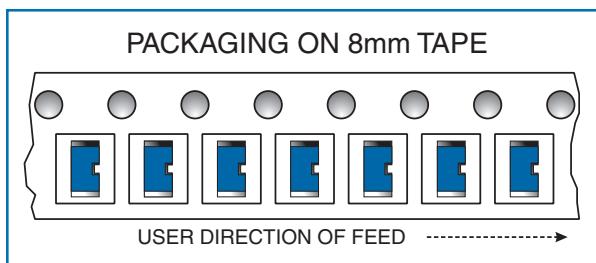
[www.ttelectronics.com/resistors](http://www.ttelectronics.com/resistors)

PFC Divider Series

## Physical Data



## Packaging Data



## Environmental Data

Test	Method	$\Delta R/R$	$\Delta$ Ratio
<b>Thermal Shock</b>	MIL-STD-202 -65 to +125°C, 5 Cycles	$\pm .02\%$	$\pm .005\%$
<b>Short Time Overload</b>	MIL-PRF-55342	$\pm .02\%$	$\pm .005\%$
<b>High Temperature Exposure</b>	MIL-PRF-55342	$\pm .03\%$	$\pm .01\%$
<b>Resistance to Bond Exposure</b>	MIL-PRF-55342	$\pm .01\%$	$\pm .01\%$
<b>Moisture Resistance</b>	MIL-STD-202 10 Cycles, 240 hours 10% Rated Power	$\pm .03\%$	$\pm .02\%$
<b>Load Life (Rated Power)</b>	MIL-PRF-55342 70°C, 1000 hours	$\pm .03\%$	$\pm .01\%$
<b>Low Temperature Operation</b>	MIL-PRF-55342	$\pm .01\%$	$\pm .005\%$

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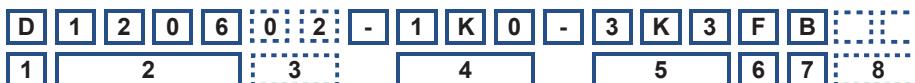
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PFC Divider Series

## Ordering Procedure

This product has two valid part numbers:

**European (Welwyn) Part Number: D120602-1K0-3K3FB** (50ppm/°C, R1=1 kilohm, R2=3.3 kilohms, absolute tolerance ±1%, ratio tolerance ±0.1%, Pb-free)



1 Type	2 Size	3 Absolute TCR	4 Value R1	5 Value R2	6 Absolute Tolerance	7 Ratio Tolerance	8 Termination & Packing
D=PFC- Divider	1206	Omit for ±25ppm/°C 02 = ±50ppm/°C 01 = ±100ppm/°C	E24 = 3/4 characters E96 = 3/4 characters R = ohms K = kilohms	A = 0.05% B = ±0.1% D = ±0.5% F = ±1%	T = +0.01% Q = ±0.02% A = ±0.05% B = ±0.1% D = ±0.5% F = ±1%	Omit for Pb-free, Standard pack PB = SnPb finish, Standard pack 1000/reel	

**USA (IRC) Part Number: PFC-D1206LF-02-1001-3301-FB** (50ppm/°C, R1=1 kilohm, R2=3.3 kilohms, absolute tolerance ±1%, ratio tolerance ±0.1%, Pb-free)



1 Family	2 Model	3 Termination	4 Absolute TCR	5 Value R1	6 Value R2	7 Absolute Tolerance	8 Ratio Tolerance	Packing
PFC	D1206	Omit for SnPb (60/40)	03 = ±25ppm/°C 02 = ±50ppm/°C 01 = ±100ppm/°C	3 digits + multiplier	R = ohms for values <100 ohms	A = ±0.05% B = ±0.1% D = ±0.5% F = ±1%	T = +0.01% Q = ±0.02% A = ±0.05% B = ±0.1% D = ±0.5% F = ±1%	1000/reel

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