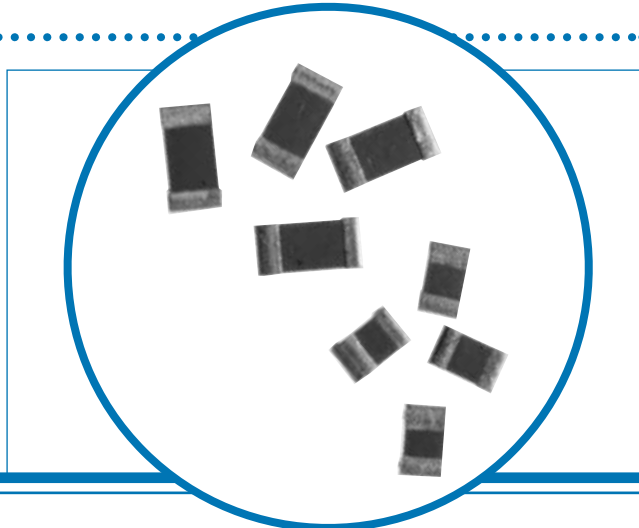


# Precision Surface Mount Resistor

## PCF Series

- **Wide ohmic range - 10 ohms to 2M ohms**
- **Tolerance down to 0.05% (0.01 available on request)**
- **TCR to 5ppm/°C**



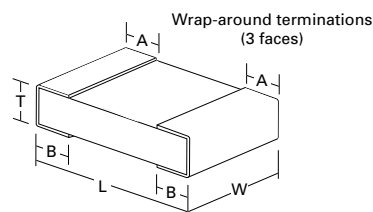
## Electrical Data

Type	TCR (ppm/°C)	Power (Watts)	Working Voltage (Volts)	Overload Voltage (Volts - Max)	Ohmic Value Range		
					0.5%	0.1%	0.05%
PCF0402	100	1/16	25	50	10R-97R6		
PCF0402	25	1/16	25	50	100R-100K	100R-100K	
PCF0603	50	1/16	75	150	10R-97R6		
PCF0603	25	1/16	75	150	100R-360K	100R-332K	
PCF0805	50	1/10	100	200	10R-97R6		
PCF0805	25	1/10	100	200	100R-1M0	100R-1M0*	
PCF0805	10	1/10	100	200	100R-100K	100R-100K	100R-100K
PCF0805	5	1/10	100	200	100R-100K	100R-100K	100R-100K
PCF1206	50	1/8	150	300	10R-49R9		
PCF1206	25	1/8	150	300	10R-1M0	10R-1M0	
PCF1206	10	1/8	150	300	100R-249K	100R-249K	100R-200K
PCF1206	5	1/8	150	300	100R-249K	100R-249K	100R-200K
PCF1210	25	1/4	200	400	51R-2M0	51R-2M0	
PCF1210	10	1/4	200	400	100R-330K	100R-330K	
PCF1210	5	1/4	200	400	100R-200K	100R-200K	

\* 10R-97R6 is available upon request.

## Physical Data

Dimensions (mm)					
Type	L	W	T	A	B
PCF0402	1.0 ± 0.05	0.5 ± 0.05	0.35 ± 0.05	0.2 ± 0.1	0.2 ± 0.1
PCF0603	1.6 ± 0.2	0.8 ± 0.2	0.45 ± 0.05	0.3 ± 0.2	0.3 ± 0.2
PCF0805	2.0 ± 0.2	1.25 ± 0.2	0.45 ± 0.05	0.4 ± 0.2	0.4 ± 0.2
PCF1206	3.2 ± 0.2	1.6 ± 0.2	0.45 ± 0.05	0.5 ± 0.2	0.5 ± 0.2
PCF1210	3.2 ± 0.2	2.6 ± 0.2	0.45 ± 0.05	0.5 ± 0.2	0.45 ± 0.2



### General Note

Welwyn Components reserves the right to make changes in product specification without notice or liability.  
All information is subject to Welwyn's own data, relates to current manufacture and is considered accurate at time of going to print.

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## Performance Data

Parameter	Conditions	Maximum Change
Load Life	1,000 hrs. @ 70°C ±2°C	±0.25% (+0.05 ohms) Max
Humidity	1,000 hrs. @ 40°C ±2°C 90 - 95% RH	±0.25% (+0.05 ohms) Max
Temperature Cycle	5 Cycles -55°C to 125°C -55°C 30 Min. then Room Temp. 2 to 3 Mins. +125°C 30 Min. then Room Temp. 2 to 3 Mins.	±0.1% (+0.05 ohms)
Low Temperature Exposure	1,000 hrs. @ -55°C +3°C	±0.25% (+0.05 ohms)
High Temperature Operation	1,000 hrs. @ +125°C +3°C	±0.25% (+0.05 ohms)
Short Time Overload	5 seconds @ 2.5 x Rated Power	±0.1% (+0.05 ohms)
Effects of Solder Heat		
Drip Method	10 ± seconds @ 270°C ±5°C	±0.1% (+0.05 ohms)
Reflow Method	40 seconds @ 240°C ±5°C	±0.1% (+0.05 ohms)
Hand Solder	3 ± 1 second @ 300°C ±5°C	±0.1% (+0.05 ohms)
Solderability	2 ± 0.5 seconds @ 235°C ±5°C	95% Minimum Coverage

## Packaging

All chips are tape mounted on standard 8mm tape reel, as IEC publication 286-3.

## Packing – Tape and Reel Only

Code	Size	Quantity Per Reel
I	PCF0402 All TCR's and Tolerances	10,000 pcs
	PCF0603	
	PCF0805 All TCR's and Tolerances	5,000 pcs
	PCF1206	
	PCF1210	
T1	PCF0603 25ppm - 0.1%	
	PCF0805 25ppm - 0.1%	
	PCF0805 10ppm All Tolerances	
	PCF0805 5ppm All Tolerances	1,000 pcs
	PCF1206 All TCR's and Tolerances	
	PCF1210 All TCR's and Tolerances	

## Temperature Coefficient Codes

R	25 ppm - Standard
-01	100 ppm
-02	50 ppm
-12	10 ppm
-13	5 ppm

## Tolerance Codes (Use IEC62)

B	0.1% - Standard
D	0.5%
W	0.05%

Where available non-standard values will only be supplied as pack code "I"

## Example

PCF1206 R - 2K0 B T1

Size PCF1206 .....  
R = 25ppm .....  
2K0 = 2000 ohms .....  
B = 0.1% .....  
T1 = 1000 pcs reel .....