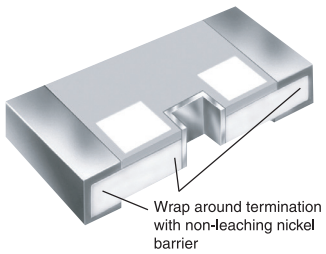
Resistors

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 amended by (EU) 2015/863 (RoHS3)

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 50ppm/°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

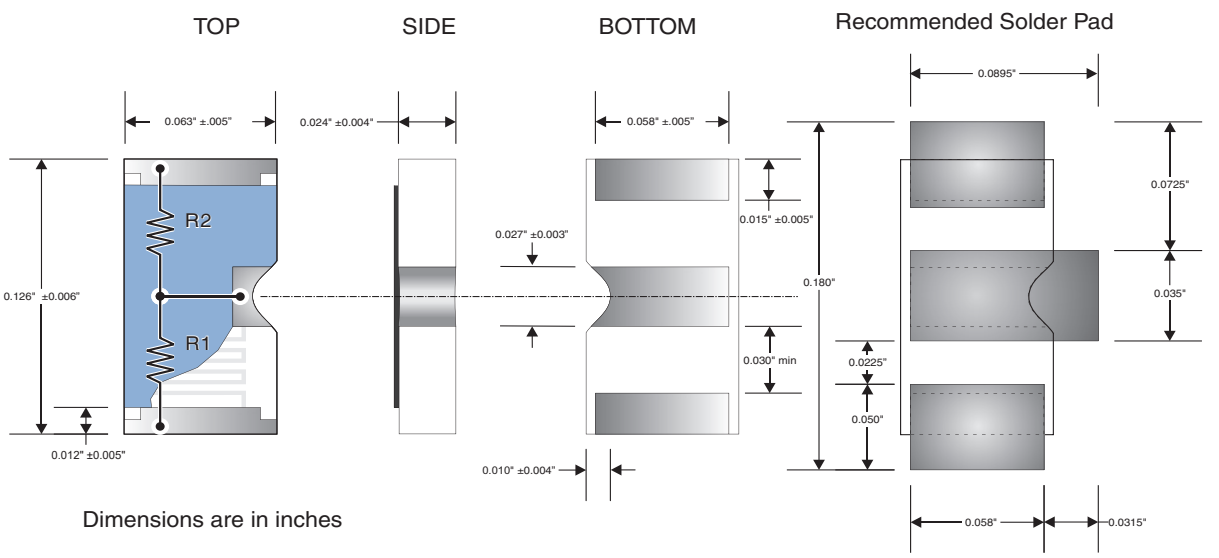
General Note

TT Electronics reserves the right to make changes in product specification without notice or liability.
All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

BI Technologies IRC Welwyn

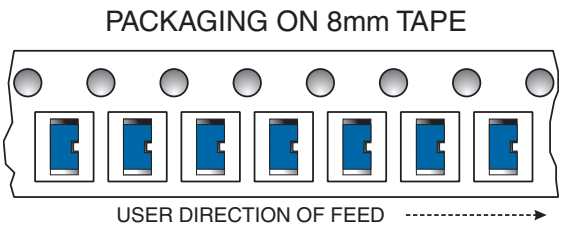
www.ttelectronics.com/resistors

Physical Data



Dimensions are in inches

Packaging Data



Environmental Data

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

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)

D	1	2	0	6	0	2	-	1	K	0	-	3	K	3	F	B		
1	2				3			4				5			6	7	8	

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	E24 = 3/4 characters E96 = 3/4 characters R = ohms K = kilohms		A = 0.05%	T = +0.01%	Omit for Pb-free, Standard pack
		02 = ±50ppm/°C			B = ±0.1%	Q = ±0.02%	
		01 = ±100ppm/°C			D = ±0.5%	A = ±0.05%	PB = SnPb finish, Standard pack
					F = ±1%	B = ±0.1%	
						D = ±0.5%	1000/reel
						F = ±1%	

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)

P	F	C	-	D	1	2	0	6	L	F	-	0	2	-	1	0	0	1	-	3	3	0	1	-	F	B
1				2					3			4			5					6					7	8

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	3 digits + multiplier		A = ±0.05%	T = +0.01%	1000/reel
			02 = ±50ppm/°C	R = ohms for values <100 ohms		B = ±0.1%	Q = ±0.02%	
		LF = Pb-free (100%Sn)	01 = ±100ppm/°C			D = ±0.5%	A = ±0.05%	
						F = ±1%	B = ±0.1%	
							D = ±0.5%	
							F = ±1%	