

RoHS  
Compliant



## Description

The resistors are constructed in a high grade ceramic body (aluminum oxide). Internal metal electrodes are added at each end and connected by a resistive layer that is applied to the top surface of the substrate. The composition of the resistive layer is adjusted to give the approximate resistance required and the value is trimmed to nominated value within tolerance which controlled by laser trimming of this resistive layer.

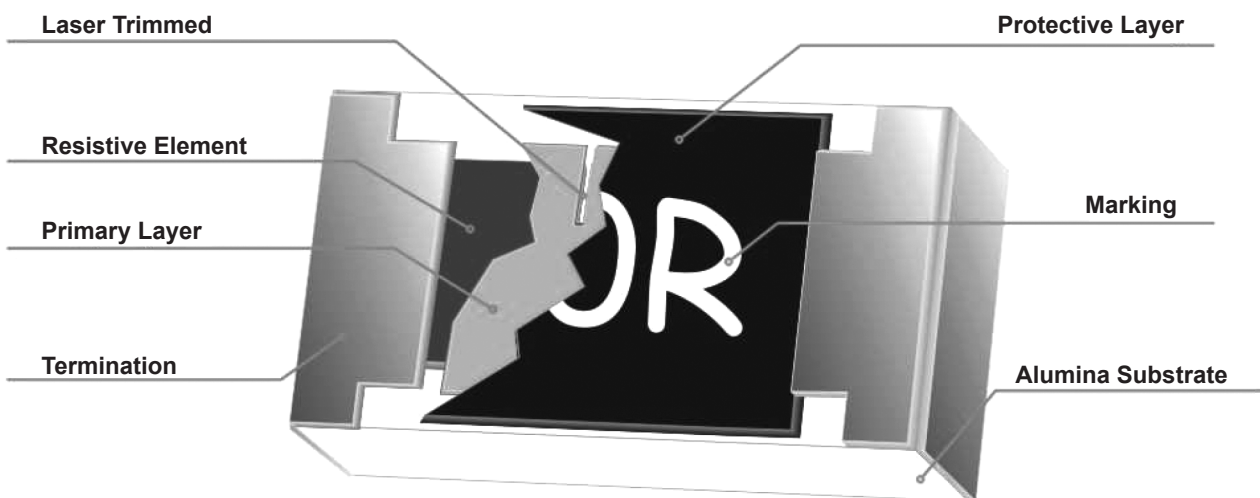
The resistive layer is covered with a protective coat. Finally, the two external end terminations are added. For environmental soldering issue, the outer layer of these end terminations is a Lead-free solder.

## Features:

- SMD metal film resistor
- High reliability and stability of 0.25% and below per customer request
- High performance of TCR: 10ppm/K and below per customer request
- Low current noise

## Application:

- Medical equipment
- Measuring instrument
- Communication device
- Computer
- Printer



## Quick Reference Data

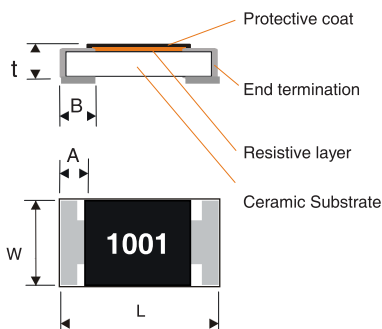
Item	General Specification	
Series No.	MCWF06W	MCWF08W
Size code	0603 (1608)	0805 (2012)
Resistance Tolerance	±0.5%, ±0.25%, ±0.1%, ±0.05%	
Resistance Range	25Ω to 100kΩ (E24 +E192)	25Ω to 200kΩ (E24 +E192)
TCR (ppm/°C)	±10 ppm/°C	
Max. dissipation at Tamb = 70°C	1/10W	1/8W
Max. Operation Voltage (DC or RMS)	50V	100V
Max. Overload Voltage (DC or RMS)	100V	200V
Operation temperature	-55°C to +155°C	

### Note :

1. This is the maximum voltage that may be continuously supplied to the resistor element, see “IEC publication 60115-8”
2. Max. Operation Voltage : So called RCWV (Rated Continuous Working Voltage) is determined by  

$$\sqrt{RCWV} = \sqrt{\text{Rated Power} \times \text{Resistance Value}}$$
 or Max. RCWV listed above, whichever is lower.
3. Tolerance ±0.05% is upon requested.

## Dimensions:



Type	MCWF06W	MCWF08W
L	1.55 ±0.1	2 ± 0.1
W	0.80 ±0.1	1.25 ± 0.1
A	0.25 ±0.15	0.25 ± 0.2
B	0.3 ±0.15	0.4 ± 0.2
t	0.45 ±0.15	0.5 ± 0.15

Dimensions : Millimetres

## Marking

- 3-digits marking for 0603 size

MCWFxxW has same marking rule as WRxx ±1%.

- 4-digits marking for 0805 size

For E24+E96, each resistor is marked with a four digits code on the protective coating to designate the nominal resistance value. For values below 97Ω 6 the R is used as a digit. For values of 100Ω or greater, the first 3 digits are significant, the fourth digit indicates the number of multiple to follow.

### Example :

Resistance	100Ω	6,800Ω	47,000Ω
4-digits marking	1,000	6,801	4,702

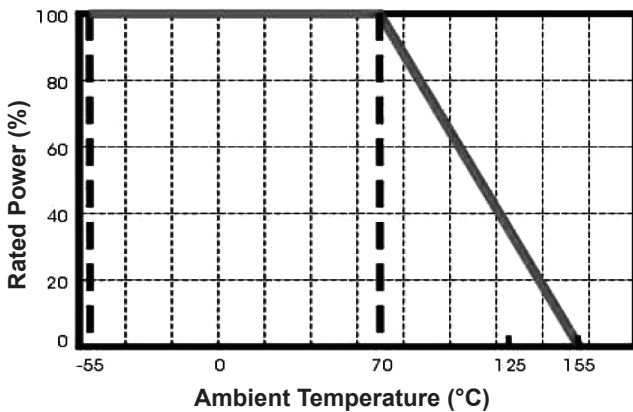
## Functional Description

Product characterization

Standard values of nominal resistance are taken from the E24 & E192 series for resistors with a tolerance of  $\pm 0.5\%$ ,  $\pm 0.25\%$ ,  $\pm 0.1\%$ . The values of the E24/E192 series are in accordance with "IEC publication 60063".

## Derating Curve

The power that the resistor can dissipate depends on the operating temperature



## Mounting

Due to their rectangular shapes and small tolerances, Surface Mountable Resistors are suitable for handling by automatic placement systems.

Chip placement can be on ceramic substrates and printed-circuit boards (PCBs).

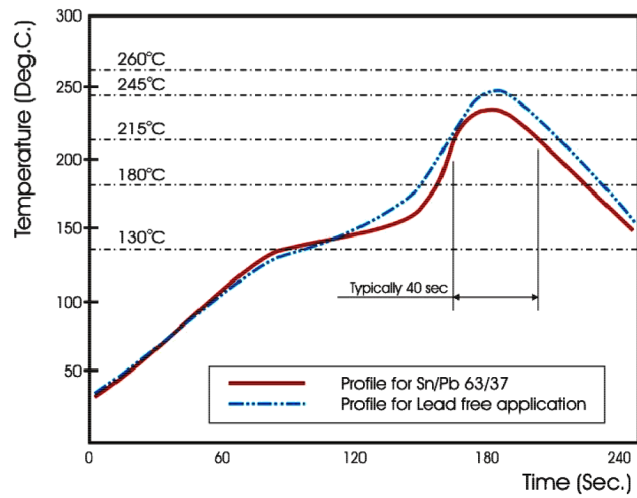
Electrical connection to the circuit is by individual soldering condition.

The end terminations guarantee a reliable contact.

## Soldering Condition

The robust construction of chip resistors allows them to be completely immersed in a solder bath of  $260^{\circ}\text{C}$  for 10 seconds. Therefore, it is possible to mount Surface Mount Resistors on one side of a PCB and other discrete components on the reverse (mixed PCBs).

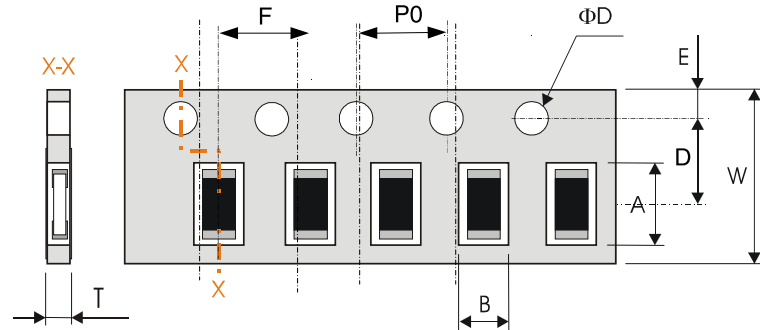
Surface Mount Resistors are tested for solderability at  $235^{\circ}\text{C}$  during 2 seconds within lead-free solder bath. The test condition for no leaching is  $260^{\circ}\text{C}$  for 30 seconds. Typical examples of soldering processes that provide reliable joints without any damage are given in below drawing.



Infrared soldering profile for Chip Resistors

## Packaging

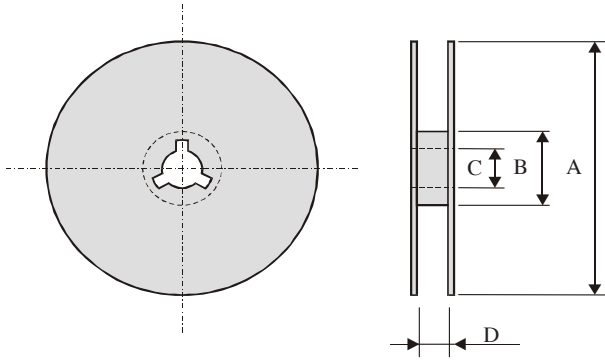
### Paper Tape specifications



Series No.	A	B	W	D	E	F	P0	ØD	T
MCWF06	1.9 ±0.2	1.1 ±0.2	8 ±0.3	3.5 ±0.2	1.75 ±0.1	4 ±0.1	4 ±0.1	Ø1.5 <sup>+0.1</sup> <sub>-0.0</sub>	0.65 ±0.05
MCWF08	2.4 ±0.2	1.65 ±0.2	8 ±0.3	3.5 ±0.2	1.75 ±0.1	4 ±0.1	4 ±0.1	Ø1.5 <sup>+0.1</sup> <sub>-0.0</sub>	Max. 1

Dimensions : Millimetres

## Reel dimensions



A	B	C	D
Ø178 ±2	Ø60 ±1	13 ±0.2	9 ±0.5

Dimensions : Millimetres

## Taping quantity

Chip resistors 5,000 pcs per reel (MCWF06W & MCWF08W)

## Part Number Table

Description	Part Number
Resistor, 0603, 1K02, 0.1%, 0.1W, Reel	MCWF06W1021BTL
Resistor, 0603, 10K2, 0.1%, 0.1W, Reel	MCWF06W1022BTL
Resistor, 0603, 1K05, 0.1%, 0.1W, Reel	MCWF06W1051BTL
Resistor, 0603, 10K5, 0.1%, 0.1W, Reel	MCWF06W1052BTL
Resistor, 0603, 1K07, 0.1%, 0.1W, Reel	MCWF06W1071BTL
Resistor, 0603, 10K7, 0.1%, 0.1W, Reel	MCWF06W1072BTL
Resistor, 0603, 1K13, 0.1%, 0.1W, Reel	MCWF06W1131BTL
Resistor, 0603, 11K3, 0.1%, 0.1W, Reel	MCWF06W1132BTL
Resistor, 0603, 1K15, 0.1%, 0.1W, Reel	MCWF06W1151BTL
Resistor, 0603, 11K5, 0.1%, 0.1W, Reel	MCWF06W1152BTL
Resistor, 0603, 1K18, 0.1%, 0.1W, Reel	MCWF06W1181BTL
Resistor, 0603, 11K8, 0.1%, 0.1W, Reel	MCWF06W1182BTL
Resistor, 0603, 1K21, 0.1%, 0.1W, Reel	MCWF06W1211BTL
Resistor, 0603, 12K1, 0.1%, 0.1W, Reel	MCWF06W1212BTL
Resistor, 0603, 1K24, 0.1%, 0.1W, Reel	MCWF06W1241BTL
Resistor, 0603, 12K4, 0.1%, 0.1W, Reel	MCWF06W1242BTL
Resistor, 0603, 1K27, 0.1%, 0.1W, Reel	MCWF06W1271BTL
Resistor, 0603, 12K7, 0.1%, 0.1W, Reel	MCWF06W1272BTL
Resistor, 0603, 1K33, 0.1%, 0.1W, Reel	MCWF06W1331BTL
Resistor, 0603, 13K3, 0.1%, 0.1W, Reel	MCWF06W1332BTL
Resistor, 0603, 1K37, 0.1%, 0.1W, Reel	MCWF06W1371BTL

Description	Part Number
Resistor, 0603, 13K7, 0.1%, 0.1W, Reel	MCWF06W1372BTL
Resistor, 0603, 1K40, 0.1%, 0.1W, Reel	MCWF06W1401BTL
Resistor, 0603, 14K0, 0.1%, 0.1W, Reel	MCWF06W1402BTL
Resistor, 0603, 1K43, 0.1%, 0.1W, Reel	MCWF06W1431BTL
Resistor, 0603, 14K3, 0.1%, 0.1W, Reel	MCWF06W1432BTL
Resistor, 0603, 1K47, 0.1%, 0.1W, Reel	MCWF06W1471BTL
Resistor, 0603, 14K7, 0.1%, 0.1W, Reel	MCWF06W1472BTL
Resistor, 0603, 1K54, 0.1%, 0.1W, Reel	MCWF06W1541BTL
Resistor, 0603, 15K4, 0.1%, 0.1W, Reel	MCWF06W1542BTL
Resistor, 0603, 1K58, 0.1%, 0.1W, Reel	MCWF06W1581BTL
Resistor, 0603, 15K8, 0.1%, 0.1W, Reel	MCWF06W1582BTL
Resistor, 0603, 1K62, 0.1%, 0.1W, Reel	MCWF06W1621BTL
Resistor, 0603, 16K2, 0.1%, 0.1W, Reel	MCWF06W1622BTL
Resistor, 0603, 1K65, 0.1%, 0.1W, Reel	MCWF06W1651BTL
Resistor, 0603, 16K5, 0.1%, 0.1W, Reel	MCWF06W1652BTL
Resistor, 0603, 1K69, 0.1%, 0.1W, Reel	MCWF06W1691BTL
Resistor, 0603, 16K9, 0.1%, 0.1W, Reel	MCWF06W1692BTL
Resistor, 0603, 1K74, 0.1%, 0.1W, Reel	MCWF06W1741BTL
Resistor, 0603, 17K4, 0.1%, 0.1W, Reel	MCWF06W1742BTL
Resistor, 0603, 1K78, 0.1%, 0.1W, Reel	MCWF06W1781BTL
Resistor, 0603, 17K8, 0.1%, 0.1W, Reel	MCWF06W1782BTL

# High Precision Thin Film Chip Resistors Full Reels



Description	Part Number
Resistor, 0603, 1K82, 0.1%, 0.1W, Reel	MCWF06W1821BTL
Resistor, 0603, 18K2, 0.1%, 0.1W, Reel	MCWF06W1822BTL
Resistor, 0603, 1K87, 0.1%, 0.1W, Reel	MCWF06W1871BTL
Resistor, 0603, 18K7, 0.1%, 0.1W, Reel	MCWF06W1872BTL
Resistor, 0603, 1K91, 0.1%, 0.1W, Reel	MCWF06W1911BTL
Resistor, 0603, 19K1, 0.1%, 0.1W, Reel	MCWF06W1912BTL
Resistor, 0603, 1K96, 0.1%, 0.1W, Reel	MCWF06W1961BTL
Resistor, 0603, 19K6, 0.1%, 0.1W, Reel	MCWF06W1962BTL
Resistor, 0603, 2K05, 0.1%, 0.1W, Reel	MCWF06W2051BTL
Resistor, 0603, 20K5, 0.1%, 0.1W, Reel	MCWF06W2052BTL
Resistor, 0603, 2K10, 0.1%, 0.1W, Reel	MCWF06W2101BTL
Resistor, 0603, 21K0, 0.1%, 0.1W, Reel	MCWF06W2102BTL
Resistor, 0603, 2K15, 0.1%, 0.1W, Reel	MCWF06W2151BTL
Resistor, 0603, 21K5, 0.1%, 0.1W, Reel	MCWF06W2152BTL
Resistor, 0603, 2K21, 0.1%, 0.1W, Reel	MCWF06W2211BTL
Resistor, 0603, 22K1, 0.1%, 0.1W, Reel	MCWF06W2212BTL
Resistor, 0603, 2K26, 0.1%, 0.1W, Reel	MCWF06W2261BTL
Resistor, 0603, 22K6, 0.1%, 0.1W, Reel	MCWF06W2262BTL
Resistor, 0603, 2K32, 0.1%, 0.1W, Reel	MCWF06W2321BTL
Resistor, 0603, 23K2, 0.1%, 0.1W, Reel	MCWF06W2322BTL
Resistor, 0603, 2K37, 0.1%, 0.1W, Reel	MCWF06W2371BTL
Resistor, 0603, 23K7, 0.1%, 0.1W, Reel	MCWF06W2372BTL
Resistor, 0603, 2K43, 0.1%, 0.1W, Reel	MCWF06W2431BTL
Resistor, 0603, 24K3, 0.1%, 0.1W, Reel	MCWF06W2432BTL
Resistor, 0603, 2K49, 0.1%, 0.1W, Reel	MCWF06W2491BTL
Resistor, 0603, 24K9, 0.1%, 0.1W, Reel	MCWF06W2492BTL
Resistor, 0603, 2K55, 0.1%, 0.1W, Reel	MCWF06W2551BTL
Resistor, 0603, 25K5, 0.1%, 0.1W, Reel	MCWF06W2552BTL
Resistor, 0603, 2K61, 0.1%, 0.1W, Reel	MCWF06W2611BTL
Resistor, 0603, 26K1, 0.1%, 0.1W, Reel	MCWF06W2612BTL
Resistor, 0603, 2K67, 0.1%, 0.1W, Reel	MCWF06W2671BTL
Resistor, 0603, 26K7, 0.1%, 0.1W, Reel	MCWF06W2672BTL
Resistor, 0603, 2K74, 0.1%, 0.1W, Reel	MCWF06W2741BTL
Resistor, 0603, 27K4, 0.1%, 0.1W, Reel	MCWF06W2742BTL
Resistor, 0603, 2K80, 0.1%, 0.1W, Reel	MCWF06W2801BTL
Resistor, 0603, 28K0, 0.1%, 0.1W, Reel	MCWF06W2802BTL
Resistor, 0603, 2K87, 0.1%, 0.1W, Reel	MCWF06W2871BTL
Resistor, 0603, 28K7, 0.1%, 0.1W, Reel	MCWF06W2872BTL

Description	Part Number
Resistor, 0603, 2K94, 0.1%, 0.1W, Reel	MCWF06W2941BTL
Resistor, 0603, 29K4, 0.1%, 0.1W, Reel	MCWF06W2942BTL
Resistor, 0603, 3K01, 0.1%, 0.1W, Reel	MCWF06W3011BTL
Resistor, 0603, 30K1, 0.1%, 0.1W, Reel	MCWF06W3012BTL
Resistor, 0603, 3K09, 0.1%, 0.1W, Reel	MCWF06W3091BTL
Resistor, 0603, 30K9, 0.1%, 0.1W, Reel	MCWF06W3092BTL
Resistor, 0603, 3K16, 0.1%, 0.1W, Reel	MCWF06W3161BTL
Resistor, 0603, 31K6, 0.1%, 0.1W, Reel	MCWF06W3162BTL
Resistor, 0603, 3K24, 0.1%, 0.1W, Reel	MCWF06W3241BTL
Resistor, 0603, 32K4, 0.1%, 0.1W, Reel	MCWF06W3242BTL
Resistor, 0603, 3K32, 0.1%, 0.1W, Reel	MCWF06W3321BTL
Resistor, 0603, 33K2, 0.1%, 0.1W, Reel	MCWF06W3322BTL
Resistor, 0603, 3K40, 0.1%, 0.1W, Reel	MCWF06W3401BTL
Resistor, 0603, 34K0, 0.1%, 0.1W, Reel	MCWF06W3402BTL
Resistor, 0603, 3K48, 0.1%, 0.1W, Reel	MCWF06W3481BTL
Resistor, 0603, 34K8, 0.1%, 0.1W, Reel	MCWF06W3482BTL
Resistor, 0603, 3K57, 0.1%, 0.1W, Reel	MCWF06W3571BTL
Resistor, 0603, 35K7, 0.1%, 0.1W, Reel	MCWF06W3572BTL
Resistor, 0603, 3K65, 0.1%, 0.1W, Reel	MCWF06W3651BTL
Resistor, 0603, 36K5, 0.1%, 0.1W, Reel	MCWF06W3652BTL
Resistor, 0603, 3K74, 0.1%, 0.1W, Reel	MCWF06W3741BTL
Resistor, 0603, 37K4, 0.1%, 0.1W, Reel	MCWF06W3742BTL
Resistor, 0603, 3K83, 0.1%, 0.1W, Reel	MCWF06W3831BTL
Resistor, 0603, 38K3, 0.1%, 0.1W, Reel	MCWF06W3832BTL
Resistor, 0603, 3K92, 0.1%, 0.1W, Reel	MCWF06W3921BTL
Resistor, 0603, 39K2, 0.1%, 0.1W, Reel	MCWF06W3922BTL
Resistor, 0603, 4K02, 0.1%, 0.1W, Reel	MCWF06W4021BTL
Resistor, 0603, 40K2, 0.1%, 0.1W, Reel	MCWF06W4022BTL
Resistor, 0603, 4K12, 0.1%, 0.1W, Reel	MCWF06W4121BTL
Resistor, 0603, 41K2, 0.1%, 0.1W, Reel	MCWF06W4122BTL
Resistor, 0603, 4K22, 0.1%, 0.1W, Reel	MCWF06W4221BTL
Resistor, 0603, 42K2, 0.1%, 0.1W, Reel	MCWF06W4222BTL
Resistor, 0603, 4K32, 0.1%, 0.1W, Reel	MCWF06W4321BTL
Resistor, 0603, 43K2, 0.1%, 0.1W, Reel	MCWF06W4322BTL
Resistor, 0603, 4K42, 0.1%, 0.1W, Reel	MCWF06W4421BTL
Resistor, 0603, 44K2, 0.1%, 0.1W, Reel	MCWF06W4422BTL
Resistor, 0603, 4K53, 0.1%, 0.1W, Reel	MCWF06W4531BTL
Resistor, 0603, 45K3, 0.1%, 0.1W, Reel	MCWF06W4532BTL



# High Precision Thin Film Chip Resistors Full Reels



Description	Part Number
Resistor, 0603, 4K64, 0.1%, 0.1W, Reel	MCWF06W4641BTL
Resistor, 0603, 46K4, 0.1%, 0.1W, Reel	MCWF06W4642BTL
Resistor, 0603, 4K75, 0.1%, 0.1W, Reel	MCWF06W4751BTL
Resistor, 0603, 47K5, 0.1%, 0.1W, Reel	MCWF06W4752BTL
Resistor, 0603, 4K87, 0.1%, 0.1W, Reel	MCWF06W4871BTL
Resistor, 0603, 48K7, 0.1%, 0.1W, Reel	MCWF06W4872BTL
Resistor, 0603, 4K99, 0.1%, 0.1W, Reel	MCWF06W4991BTL
Resistor, 0603, 49K9, 0.1%, 0.1W, Reel	MCWF06W4992BTL
Resistor, 0603, 5K11, 0.1%, 0.1W, Reel	MCWF06W5111BTL
Resistor, 0603, 51K1, 0.1%, 0.1W, Reel	MCWF06W5112BTL
Resistor, 0603, 5K23, 0.1%, 0.1W, Reel	MCWF06W5231BTL
Resistor, 0603, 52K3, 0.1%, 0.1W, Reel	MCWF06W5232BTL
Resistor, 0603, 5K36, 0.1%, 0.1W, Reel	MCWF06W5361BTL
Resistor, 0603, 53K6, 0.1%, 0.1W, Reel	MCWF06W5362BTL
Resistor, 0603, 5K49, 0.1%, 0.1W, Reel	MCWF06W5491BTL
Resistor, 0603, 54K9, 0.1%, 0.1W, Reel	MCWF06W5492BTL
Resistor, 0603, 5K62, 0.1%, 0.1W, Reel	MCWF06W5621BTL
Resistor, 0603, 56K2, 0.1%, 0.1W, Reel	MCWF06W5622BTL
Resistor, 0603, 5K76, 0.1%, 0.1W, Reel	MCWF06W5761BTL
Resistor, 0603, 57K6, 0.1%, 0.1W, Reel	MCWF06W5762BTL
Resistor, 0603, 5K90, 0.1%, 0.1W, Reel	MCWF06W5901BTL
Resistor, 0603, 59K0, 0.1%, 0.1W, Reel	MCWF06W5902BTL
Resistor, 0603, 6K04, 0.1%, 0.1W, Reel	MCWF06W6041BTL
Resistor, 0603, 60K4, 0.1%, 0.1W, Reel	MCWF06W6042BTL
Resistor, 0603, 6K19, 0.1%, 0.1W, Reel	MCWF06W6191BTL
Resistor, 0603, 61K9, 0.1%, 0.1W, Reel	MCWF06W6192BTL
Resistor, 0603, 6K34, 0.1%, 0.1W, Reel	MCWF06W6341BTL
Resistor, 0603, 63K4, 0.1%, 0.1W, Reel	MCWF06W6342BTL
Resistor, 0603, 6K49, 0.1%, 0.1W, Reel	MCWF06W6491BTL
Resistor, 0603, 64K9, 0.1%, 0.1W, Reel	MCWF06W6492BTL
Resistor, 0603, 6K65, 0.1%, 0.1W, Reel	MCWF06W6651BTL
Resistor, 0603, 66K5, 0.1%, 0.1W, Reel	MCWF06W6652BTL
Resistor, 0603, 6K81, 0.1%, 0.1W, Reel	MCWF06W6811BTL
Resistor, 0603, 68K1, 0.1%, 0.1W, Reel	MCWF06W6812BTL
Resistor, 0603, 6K98, 0.1%, 0.1W, Reel	MCWF06W6981BTL
Resistor, 0603, 69K8, 0.1%, 0.1W, Reel	MCWF06W6982BTL
Resistor, 0603, 7K15, 0.1%, 0.1W, Reel	MCWF06W7151BTL
Resistor, 0603, 71K5, 0.1%, 0.1W, Reel	MCWF06W7152BTL

Description	Part Number
Resistor, 0603, 7K32, 0.1%, 0.1W, Reel	MCWF06W7321BTL
Resistor, 0603, 73K2, 0.1%, 0.1W, Reel	MCWF06W7322BTL
Resistor, 0603, 7K68, 0.1%, 0.1W, Reel	MCWF06W7681BTL
Resistor, 0603, 76K8, 0.1%, 0.1W, Reel	MCWF06W7682BTL
Resistor, 0603, 7K87, 0.1%, 0.1W, Reel	MCWF06W7871BTL
Resistor, 0603, 78K7, 0.1%, 0.1W, Reel	MCWF06W7872BTL
Resistor, 0603, 8K06, 0.1%, 0.1W, Reel	MCWF06W8061BTL
Resistor, 0603, 80K6, 0.1%, 0.1W, Reel	MCWF06W8062BTL
Resistor, 0603, 8K25, 0.1%, 0.1W, Reel	MCWF06W8251BTL
Resistor, 0603, 82K5, 0.1%, 0.1W, Reel	MCWF06W8252BTL
Resistor, 0603, 8K45, 0.1%, 0.1W, Reel	MCWF06W8451BTL
Resistor, 0603, 84K5, 0.1%, 0.1W, Reel	MCWF06W8452BTL
Resistor, 0603, 8K66, 0.1%, 0.1W, Reel	MCWF06W8661BTL
Resistor, 0603, 86K6, 0.1%, 0.1W, Reel	MCWF06W8662BTL
Resistor, 0603, 8K87, 0.1%, 0.1W, Reel	MCWF06W8871BTL
Resistor, 0603, 88K7, 0.1%, 0.1W, Reel	MCWF06W8872BTL
Resistor, 0603, 9K09, 0.1%, 0.1W, Reel	MCWF06W9091BTL
Resistor, 0603, 90K9, 0.1%, 0.1W, Reel	MCWF06W9092BTL
Resistor, 0603, 9K31, 0.1%, 0.1W, Reel	MCWF06W9311BTL
Resistor, 0603, 93K1, 0.1%, 0.1W, Reel	MCWF06W9312BTL
Resistor, 0603, 9K53, 0.1%, 0.1W, Reel	MCWF06W9531BTL
Resistor, 0603, 95K3, 0.1%, 0.1W, Reel	MCWF06W9532BTL
Resistor, 0603, 9K76, 0.1%, 0.1W, Reel	MCWF06W9761BTL
Resistor, 0603, 97K6, 0.1%, 0.1W, Reel	MCWF06W9762BTL
Resistor, 0805, 1K02, 0.1%, 0.125W, Reel	MCWF08W1021BTL
Resistor, 0805, 10K2, 0.1%, 0.125W, Reel	MCWF08W1022BTL
Resistor, 0805, 1K05, 0.1%, 0.125W, Reel	MCWF08W1051BTL
Resistor, 0805, 10K5, 0.1%, 0.125W, Reel	MCWF08W1052BTL
Resistor, 0805, 1K07, 0.1%, 0.125W, Reel	MCWF08W1071BTL
Resistor, 0805, 10K7, 0.1%, 0.125W, Reel	MCWF08W1072BTL
Resistor, 0805, 1K13, 0.1%, 0.125W, Reel	MCWF08W1131BTL
Resistor, 0805, 11K3, 0.1%, 0.125W, Reel	MCWF08W1132BTL
Resistor, 0805, 1K15, 0.1%, 0.125W, Reel	MCWF08W1151BTL
Resistor, 0805, 11K5, 0.1%, 0.125W, Reel	MCWF08W1152BTL
Resistor, 0805, 1K18, 0.1%, 0.125W, Reel	MCWF08W1181BTL
Resistor, 0805, 11K8, 0.1%, 0.125W, Reel	MCWF08W1182BTL
Resistor, 0805, 1K21, 0.1%, 0.125W, Reel	MCWF08W1211BTL
Resistor, 0805, 12K1, 0.1%, 0.125W, Reel	MCWF08W1212BTL

# High Precision Thin Film Chip Resistors Full Reels



Description	Part Number
Resistor, 0805, 1K24, 0.1%, 0.125W, Reel	MCWF08W1241BTL
Resistor, 0805, 12K4, 0.1%, 0.125W, Reel	MCWF08W1242BTL
Resistor, 0805, 1K27, 0.1%, 0.125W, Reel	MCWF08W1271BTL
Resistor, 0805, 12K7, 0.1%, 0.125W, Reel	MCWF08W1272BTL
Resistor, 0805, 1K33, 0.1%, 0.125W, Reel	MCWF08W1331BTL
Resistor, 0805, 13K3, 0.1%, 0.125W, Reel	MCWF08W1332BTL
Resistor, 0805, 1K37, 0.1%, 0.125W, Reel	MCWF08W1371BTL
Resistor, 0805, 13K7, 0.1%, 0.125W, Reel	MCWF08W1372BTL
Resistor, 0805, 1K40, 0.1%, 0.125W, Reel	MCWF08W1401BTL
Resistor, 0805, 14K0, 0.1%, 0.125W, Reel	MCWF08W1402BTL
Resistor, 0805, 1K43, 0.1%, 0.125W, Reel	MCWF08W1431BTL
Resistor, 0805, 14K3, 0.1%, 0.125W, Reel	MCWF08W1432BTL
Resistor, 0805, 1K47, 0.1%, 0.125W, Reel	MCWF08W1471BTL
Resistor, 0805, 14K7, 0.1%, 0.125W, Reel	MCWF08W1472BTL
Resistor, 0805, 1K54, 0.1%, 0.125W, Reel	MCWF08W1541BTL
Resistor, 0805, 15K4, 0.1%, 0.125W, Reel	MCWF08W1542BTL
Resistor, 0805, 1K58, 0.1%, 0.125W, Reel	MCWF08W1581BTL
Resistor, 0805, 15K8, 0.1%, 0.125W, Reel	MCWF08W1582BTL
Resistor, 0805, 1K62, 0.1%, 0.125W, Reel	MCWF08W1621BTL
Resistor, 0805, 16K2, 0.1%, 0.125W, Reel	MCWF08W1622BTL
Resistor, 0805, 1K65, 0.1%, 0.125W, Reel	MCWF08W1651BTL
Resistor, 0805, 16K5, 0.1%, 0.125W, Reel	MCWF08W1652BTL
Resistor, 0805, 1K69, 0.1%, 0.125W, Reel	MCWF08W1691BTL
Resistor, 0805, 16K9, 0.1%, 0.125W, Reel	MCWF08W1692BTL
Resistor, 0805, 1K74, 0.1%, 0.125W, Reel	MCWF08W1741BTL
Resistor, 0805, 17K4, 0.1%, 0.125W, Reel	MCWF08W1742BTL
Resistor, 0805, 1K78, 0.1%, 0.125W, Reel	MCWF08W1781BTL
Resistor, 0805, 17K8, 0.1%, 0.125W, Reel	MCWF08W1782BTL
Resistor, 0805, 1K82, 0.1%, 0.125W, Reel	MCWF08W1821BTL
Resistor, 0805, 18K2, 0.1%, 0.125W, Reel	MCWF08W1822BTL
Resistor, 0805, 1K87, 0.1%, 0.125W, Reel	MCWF08W1871BTL
Resistor, 0805, 18K7, 0.1%, 0.125W, Reel	MCWF08W1872BTL
Resistor, 0805, 1K91, 0.1%, 0.125W, Reel	MCWF08W1911BTL
Resistor, 0805, 19K1, 0.1%, 0.125W, Reel	MCWF08W1912BTL
Resistor, 0805, 1K96, 0.1%, 0.125W, Reel	MCWF08W1961BTL
Resistor, 0805, 19K6, 0.1%, 0.125W, Reel	MCWF08W1962BTL
Resistor, 0805, 2K05, 0.1%, 0.125W, Reel	MCWF08W2051BTL
Resistor, 0805, 20K5, 0.1%, 0.125W, Reel	MCWF08W2052BTL

Description	Part Number
Resistor, 0805, 2K10, 0.1%, 0.125W, Reel	MCWF08W2101BTL
Resistor, 0805, 21K0, 0.1%, 0.125W, Reel	MCWF08W2102BTL
Resistor, 0805, 2K15, 0.1%, 0.125W, Reel	MCWF08W2151BTL
Resistor, 0805, 21K5, 0.1%, 0.125W, Reel	MCWF08W2152BTL
Resistor, 0805, 2K21, 0.1%, 0.125W, Reel	MCWF08W2211BTL
Resistor, 0805, 22K1, 0.1%, 0.125W, Reel	MCWF08W2212BTL
Resistor, 0805, 2K26, 0.1%, 0.125W, Reel	MCWF08W2261BTL
Resistor, 0805, 22K6, 0.1%, 0.125W, Reel	MCWF08W2262BTL
Resistor, 0805, 2K32, 0.1%, 0.125W, Reel	MCWF08W2321BTL
Resistor, 0805, 23K2, 0.1%, 0.125W, Reel	MCWF08W2322BTL
Resistor, 0805, 2K37, 0.1%, 0.125W, Reel	MCWF08W2371BTL
Resistor, 0805, 23K7, 0.1%, 0.125W, Reel	MCWF08W2372BTL
Resistor, 0805, 2K43, 0.1%, 0.125W, Reel	MCWF08W2431BTL
Resistor, 0805, 24K3, 0.1%, 0.125W, Reel	MCWF08W2432BTL
Resistor, 0805, 2K49, 0.1%, 0.125W, Reel	MCWF08W2491BTL
Resistor, 0805, 24K9, 0.1%, 0.125W, Reel	MCWF08W2492BTL
Resistor, 0805, 2K55, 0.1%, 0.125W, Reel	MCWF08W2551BTL
Resistor, 0805, 25K5, 0.1%, 0.125W, Reel	MCWF08W2552BTL
Resistor, 0805, 2K61, 0.1%, 0.125W, Reel	MCWF08W2611BTL
Resistor, 0805, 26K1, 0.1%, 0.125W, Reel	MCWF08W2612BTL
Resistor, 0805, 2K67, 0.1%, 0.125W, Reel	MCWF08W2671BTL
Resistor, 0805, 26K7, 0.1%, 0.125W, Reel	MCWF08W2672BTL
Resistor, 0805, 2K74, 0.1%, 0.125W, Reel	MCWF08W2741BTL
Resistor, 0805, 27K4, 0.1%, 0.125W, Reel	MCWF08W2742BTL
Resistor, 0805, 2K80, 0.1%, 0.125W, Reel	MCWF08W2801BTL
Resistor, 0805, 28K0, 0.1%, 0.125W, Reel	MCWF08W2802BTL
Resistor, 0805, 2K87, 0.1%, 0.125W, Reel	MCWF08W2871BTL
Resistor, 0805, 28K7, 0.1%, 0.125W, Reel	MCWF08W2872BTL
Resistor, 0805, 2K94, 0.1%, 0.125W, Reel	MCWF08W2941BTL
Resistor, 0805, 29K4, 0.1%, 0.125W, Reel	MCWF08W2942BTL
Resistor, 0805, 3K01, 0.1%, 0.125W, Reel	MCWF08W3011BTL
Resistor, 0805, 30K1, 0.1%, 0.125W, Reel	MCWF08W3012BTL
Resistor, 0805, 3K09, 0.1%, 0.125W, Reel	MCWF08W3091BTL
Resistor, 0805, 30K9, 0.1%, 0.125W, Reel	MCWF08W3092BTL
Resistor, 0805, 3K16, 0.1%, 0.125W, Reel	MCWF08W3161BTL
Resistor, 0805, 31K6, 0.1%, 0.125W, Reel	MCWF08W3162BTL
Resistor, 0805, 3K24, 0.1%, 0.125W, Reel	MCWF08W3241BTL
Resistor, 0805, 32K4, 0.1%, 0.125W, Reel	MCWF08W3242BTL





# High Precision Thin Film Chip Resistors Full Reels



Description	Part Number
Resistor, 0805, 3K32, 0.1%, 0.125W, Reel	MCWF08W3321BTL
Resistor, 0805, 33K2, 0.1%, 0.125W, Reel	MCWF08W3322BTL
Resistor, 0805, 3K40, 0.1%, 0.125W, Reel	MCWF08W3401BTL
Resistor, 0805, 34K0, 0.1%, 0.125W, Reel	MCWF08W3402BTL
Resistor, 0805, 3K48, 0.1%, 0.125W, Reel	MCWF08W3481BTL
Resistor, 0805, 34K8, 0.1%, 0.125W, Reel	MCWF08W3482BTL
Resistor, 0805, 3K57, 0.1%, 0.125W, Reel	MCWF08W3571BTL
Resistor, 0805, 35K7, 0.1%, 0.125W, Reel	MCWF08W3572BTL
Resistor, 0805, 3K65, 0.1%, 0.125W, Reel	MCWF08W3651BTL
Resistor, 0805, 36K5, 0.1%, 0.125W, Reel	MCWF08W3652BTL
Resistor, 0805, 3K74, 0.1%, 0.125W, Reel	MCWF08W3741BTL
Resistor, 0805, 37K4, 0.1%, 0.125W, Reel	MCWF08W3742BTL
Resistor, 0805, 3K83, 0.1%, 0.125W, Reel	MCWF08W3831BTL
Resistor, 0805, 38K3, 0.1%, 0.125W, Reel	MCWF08W3832BTL
Resistor, 0805, 3K92, 0.1%, 0.125W, Reel	MCWF08W3921BTL
Resistor, 0805, 39K2, 0.1%, 0.125W, Reel	MCWF08W3922BTL
Resistor, 0805, 4K02, 0.1%, 0.125W, Reel	MCWF08W4021BTL
Resistor, 0805, 40K2, 0.1%, 0.125W, Reel	MCWF08W4022BTL
Resistor, 0805, 4K12, 0.1%, 0.125W, Reel	MCWF08W4121BTL
Resistor, 0805, 41K2, 0.1%, 0.125W, Reel	MCWF08W4122BTL
Resistor, 0805, 4K22, 0.1%, 0.125W, Reel	MCWF08W4221BTL
Resistor, 0805, 42K2, 0.1%, 0.125W, Reel	MCWF08W4222BTL
Resistor, 0805, 4K32, 0.1%, 0.125W, Reel	MCWF08W4321BTL
Resistor, 0805, 43K2, 0.1%, 0.125W, Reel	MCWF08W4322BTL
Resistor, 0805, 4K42, 0.1%, 0.125W, Reel	MCWF08W4421BTL
Resistor, 0805, 44K2, 0.1%, 0.125W, Reel	MCWF08W4422BTL
Resistor, 0805, 4K53, 0.1%, 0.125W, Reel	MCWF08W4531BTL
Resistor, 0805, 45K3, 0.1%, 0.125W, Reel	MCWF08W4532BTL
Resistor, 0805, 4K64, 0.1%, 0.125W, Reel	MCWF08W4641BTL
Resistor, 0805, 46K4, 0.1%, 0.125W, Reel	MCWF08W4642BTL
Resistor, 0805, 4K75, 0.1%, 0.125W, Reel	MCWF08W4751BTL
Resistor, 0805, 47K5, 0.1%, 0.125W, Reel	MCWF08W4752BTL
Resistor, 0805, 4K87, 0.1%, 0.125W, Reel	MCWF08W4871BTL
Resistor, 0805, 48K7, 0.1%, 0.125W, Reel	MCWF08W4872BTL
Resistor, 0805, 4K99, 0.1%, 0.125W, Reel	MCWF08W4991BTL
Resistor, 0805, 49K9, 0.1%, 0.125W, Reel	MCWF08W4992BTL
Resistor, 0805, 5K11, 0.1%, 0.125W, Reel	MCWF08W5111BTL
Resistor, 0805, 51K1, 0.1%, 0.125W, Reel	MCWF08W5112BTL

Description	Part Number
Resistor, 0805, 5K23, 0.1%, 0.125W, Reel	MCWF08W5231BTL
Resistor, 0805, 52K3, 0.1%, 0.125W, Reel	MCWF08W5232BTL
Resistor, 0805, 5K36, 0.1%, 0.125W, Reel	MCWF08W5361BTL
Resistor, 0805, 53K6, 0.1%, 0.125W, Reel	MCWF08W5362BTL
Resistor, 0805, 5K49, 0.1%, 0.125W, Reel	MCWF08W5491BTL
Resistor, 0805, 54K9, 0.1%, 0.125W, Reel	MCWF08W5492BTL
Resistor, 0805, 5K62, 0.1%, 0.125W, Reel	MCWF08W5621BTL
Resistor, 0805, 56K2, 0.1%, 0.125W, Reel	MCWF08W5622BTL
Resistor, 0805, 5K76, 0.1%, 0.125W, Reel	MCWF08W5761BTL
Resistor, 0805, 57K6, 0.1%, 0.125W, Reel	MCWF08W5762BTL
Resistor, 0805, 5K90, 0.1%, 0.125W, Reel	MCWF08W5901BTL
Resistor, 0805, 59K0, 0.1%, 0.125W, Reel	MCWF08W5902BTL
Resistor, 0805, 6K04, 0.1%, 0.125W, Reel	MCWF08W6041BTL
Resistor, 0805, 60K4, 0.1%, 0.125W, Reel	MCWF08W6042BTL
Resistor, 0805, 6K19, 0.1%, 0.125W, Reel	MCWF08W6191BTL
Resistor, 0805, 61K9, 0.1%, 0.125W, Reel	MCWF08W6192BTL
Resistor, 0805, 6K34, 0.1%, 0.125W, Reel	MCWF08W6341BTL
Resistor, 0805, 63K4, 0.1%, 0.125W, Reel	MCWF08W6342BTL
Resistor, 0805, 6K49, 0.1%, 0.125W, Reel	MCWF08W6491BTL
Resistor, 0805, 64K9, 0.1%, 0.125W, Reel	MCWF08W6492BTL
Resistor, 0805, 6K65, 0.1%, 0.125W, Reel	MCWF08W6651BTL
Resistor, 0805, 66K5, 0.1%, 0.125W, Reel	MCWF08W6652BTL
Resistor, 0805, 6K81, 0.1%, 0.125W, Reel	MCWF08W6811BTL
Resistor, 0805, 68K1, 0.1%, 0.125W, Reel	MCWF08W6812BTL
Resistor, 0805, 6K98, 0.1%, 0.125W, Reel	MCWF08W6981BTL
Resistor, 0805, 69K8, 0.1%, 0.125W, Reel	MCWF08W6982BTL
Resistor, 0805, 7K15, 0.1%, 0.125W, Reel	MCWF08W7151BTL
Resistor, 0805, 71K5, 0.1%, 0.125W, Reel	MCWF08W7152BTL
Resistor, 0805, 7K32, 0.1%, 0.125W, Reel	MCWF08W7321BTL
Resistor, 0805, 73K2, 0.1%, 0.125W, Reel	MCWF08W7322BTL
Resistor, 0805, 7K68, 0.1%, 0.125W, Reel	MCWF08W7681BTL
Resistor, 0805, 76K8, 0.1%, 0.125W, Reel	MCWF08W7682BTL
Resistor, 0805, 7K87, 0.1%, 0.125W, Reel	MCWF08W7871BTL
Resistor, 0805, 78K7, 0.1%, 0.125W, Reel	MCWF08W7872BTL
Resistor, 0805, 8K06, 0.1%, 0.125W, Reel	MCWF08W8061BTL
Resistor, 0805, 80K6, 0.1%, 0.125W, Reel	MCWF08W8062BTL
Resistor, 0805, 8K25, 0.1%, 0.125W, Reel	MCWF08W8251BTL
Resistor, 0805, 82K5, 0.1%, 0.125W, Reel	MCWF08W8252BTL



# High Precision Thin Film Chip Resistors Full Reels

**multicomp** PRO

Description	Part Number
Resistor, 0805, 8K45, 0.1%, 0.125W, Reel	MCWF08W8451BTL
Resistor, 0805, 84K5, 0.1%, 0.125W, Reel	MCWF08W8452BTL
Resistor, 0805, 8K66, 0.1%, 0.125W, Reel	MCWF08W8661BTL
Resistor, 0805, 86K6, 0.1%, 0.125W, Reel	MCWF08W8662BTL
Resistor, 0805, 8K87, 0.1%, 0.125W, Reel	MCWF08W8871BTL
Resistor, 0805, 88K7, 0.1%, 0.125W, Reel	MCWF08W8872BTL
Resistor, 0805, 9K09, 0.1%, 0.125W, Reel	MCWF08W9091BTL
Resistor, 0805, 90K9, 0.1%, 0.125W, Reel	MCWF08W9092BTL
Resistor, 0805, 9K31, 0.1%, 0.125W, Reel	MCWF08W9311BTL
Resistor, 0805, 93K1, 0.1%, 0.125W, Reel	MCWF08W9312BTL
Resistor, 0805, 9K53, 0.1%, 0.125W, Reel	MCWF08W9531BTL
Resistor, 0805, 95K3, 0.1%, 0.125W, Reel	MCWF08W9532BTL
Resistor, 0805, 9K76, 0.1%, 0.125W, Reel	MCWF08W9761BTL
Resistor, 0805, 97K6, 0.1%, 0.125W, Reel	MCWF08W9762BTL

**Important Notice :** This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.

Newark.com/multicomp-pro  
Farnell.com/multicomp-pro  
Element14.com/multicomp-pro

**multicomp** PRO