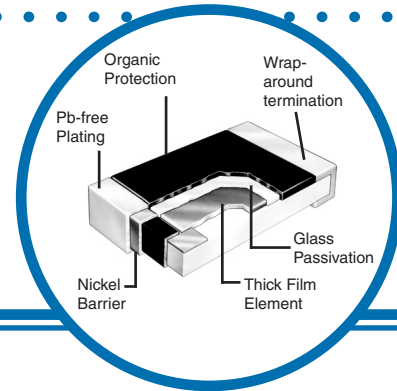


# General Purpose Thick Film Chip Resistor

## WCR Series

- Tolerances to  $\pm 0.5\%$
- TCR down to  $\pm 50$  ppm/ $^{\circ}\text{C}$
- Zero ohm jumpers available
- Wide ohmic range 1 ohm to 22M ohm
- Now supplied with Pb-free terminations



## Specifications

P/N	TCR (ppm/C)	Ohmic Range				Rated Power at 70C (milliwatts)	Max. Working Voltage	Max. Overload Voltage	Packaging	
		$\pm 5\%$	$\pm 2\%$	$\pm 1\%$	$\pm 0.5\%$				Carrier Tape	Qty.
WCR0402	$\pm 200$ $\pm 100$ $\pm 50$	4R7-1M N/A N/A	N/A N/A N/A	N/A 10R-1M N/A	N/A N/A N/A	63	50	100	Card-board	10K
WCR0603	$\pm 400$ $\pm 200$ $\pm 100$ $\pm 50$	1R0-9R76, 1M1-10M 10R-1M N/A N/A	1R0-9R76, 1M1-10M N/A 10R-1M N/A	1R0-9R76 N/A 10R-1M N/A	1R0-9R76 N/A N/A 1R0-1M	100	50	100	Card-board	5K
WCR0805	$\pm 400$ $\pm 200$ $\pm 100$ $\pm 50$	1R0-9R76, 6M2-22M 10R-5.6M N/A N/A	N/A 1R0-10M N/A N/A	1R0-9R76, 1M1-10M N/A 10R-976K N/A	N/A N/A N/A 10R-1M	125	150	200	Card-board	5K
WCR1206	$\pm 400$ $\pm 200$ $\pm 100$ $\pm 50$	1R0-9R76, 6M2-22M 10R-5M6 N/A N/A	N/A 1R0-10M N/A N/A	1R0-9R76, 1M1-10M N/A 10R-976K N/A	N/A N/A N/A 10R-1M	250	200	400	Card-board	5K
WCR1210	$\pm 400$ $\pm 200$ $\pm 100$	1R0-9R76, 1M1-10M 10R-1M N/A	N/A 10R-1M N/A	1R0-9R76, 1M1-10M N/A 10R-976K	N/A N/A 10R-976K	250	200	400	Plastic	4K
WCR2010	$\pm 400$ $\pm 200$ $\pm 100$ $\pm 50$	1R0-9R76, 6M2-22M 10R-5M6 N/A N/A	N/A 10R-1M N/A N/A	1R0-9R76, 1M1-10M N/A 10R-1M N/A	N/A N/A N/A 10R-976K	500	200	400	Plastic	4K
WCR2512	$\pm 400$ $\pm 200$ $\pm 100$ $\pm 50$	1R0-9R76, 6M2-22M 10R-5M6 N/A N/A	N/A 10R-1M N/A N/A	1R0-9R76, 1M1-10M N/A 10R-1M N/A	N/A N/A N/A 10R-976K	1000	200	400	Plastic	4K

### General Note

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

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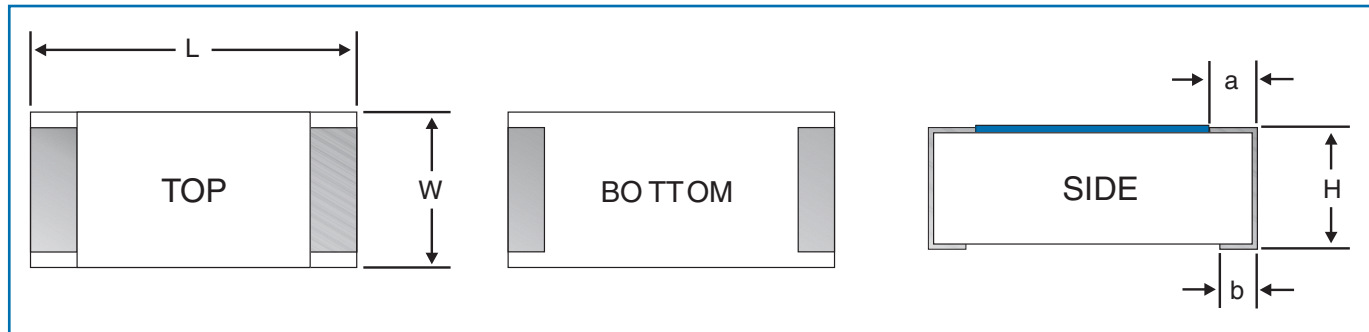


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TT electronics plc

WCR Series Issue February 2005

# General Purpose Thick Film Chip Resistor

## Dimensions (inches)



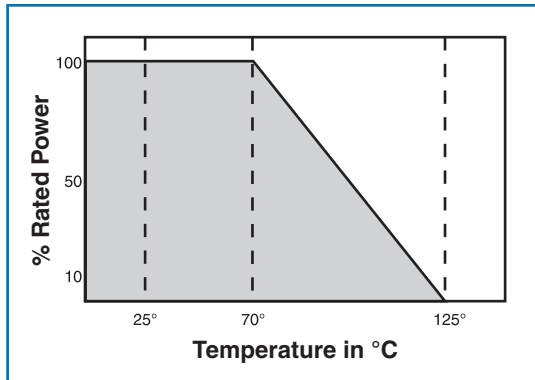
Model	L	W	H	a	b
WCR0402	0.039±0.002	0.020±0.002	0.014±0.002	0.008±0.004	0.010±0.002
WCR0603	0.063±0.008	0.032±0.008	0.020±0.005	0.012±0.009	0.012±0.009
WCR0805	0.079±0.008	0.049±0.008	0.020±0.005	0.016±0.009	0.012±0.009
WCR1206	0.125±0.009	0.063±0.008	0.024±0.005	0.020±0.013	0.016±0.008
WCR1210	0.126±0.008	0.102±0.008	0.024±0.004	0.020±0.012	0.016±0.008
WCR2010	0.197±0.008	0.098±0.008	0.024±0.004	0.020±0.012	0.016±0.008
WCR2512	0.248±0.008	0.122±0.008	0.024±0.004	0.020±0.012	0.016±0.008

## Environmental Performance

Test Conditions	Test Method	Max Change (5%)	Max Change (1%)
Short Time Overload	5 Seconds 2.5 X Rated Power	±2.0%	±0.75%
Temperature Cycling	5 Cycles -55°C to +125°C	±0.5%	±0.5%
Humidity	1000 Hours 40°C ±2°C 90-95% RH	±3.0%	±1.0%
Load Life	1000 Hours 70°C ±3°C	±3.0%	±1.0%
High Temperature Exposure	1000 Hours 125°C ±3°C	±1.0%	±1.0%
Low Temperature Exposure	1000 Hours -55°C ±3°C	±1.0%	±1.0%
Effects of Solder Heat	10 ±1 Seconds 260°C ±5°C	±1.0%	±0.75%
Solderability	3 ±0.5 Seconds 235°C ±5°C	95% Min Coverage	95% Min Coverage

# General Purpose Thick Film Chip Resistor

## Power Derating Chart



## Ordering Data

Sample Part Number:

WCR - **WCR1206LF** - **1001** - **F** - **P** - **LT**

### Model

WCR0402LF, WCR0603LF, WCR0805LF, WCR1206LF,  
WCR1210LF, WCR2010LF, WCR2512LF

### Resistance

3-digit resistance code for tolerances G and J.  
4-digit resistance code for tolerances F and D.

Tape & Reel Packaging

### Tape Type

(P=Paper, E=Plastic)

### Tolerance

J=±5%, G=±2%, F=±1, D=±0.5%

For additional information or to discuss your specific requirements, please contact our Applications Team using the contact details below.