

0302PW
0402PW
0502PW

RCX

Partial Wraparound

0603PW
0805PW



Features

Thick film technology

Partial Wraparound

Platinum Silver, Platinum Silver with Solder Coating, Platinum Gold with Solder Coating

Resistance values from 10Ω to 2KΩ

Tolerances to ± 1 %

TCR to ±100 ppm/°C

Usable to beyond 40 GHz (size dependent)

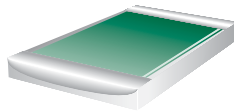


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Partial Wraparound Thick Film Chip Resistors for High Frequency Applications

The *ims* RCX PW line of partial wrap surface mount chip resistors is ideally suited for applications requiring high frequency performance from a miniature surface mounted chip resistor. The "X" designation in each series is a variable that allows for specifying the termination metalization. Please see the ordering information on the back for instructions. The device is designed to be mounted face down on the circuit board or hybrid substrate allowing resistor element placement within the same plane as the rest of the circuit. This placement minimizes the effects of the wraparound that would normally be seen in a typical surface mount arrangement.

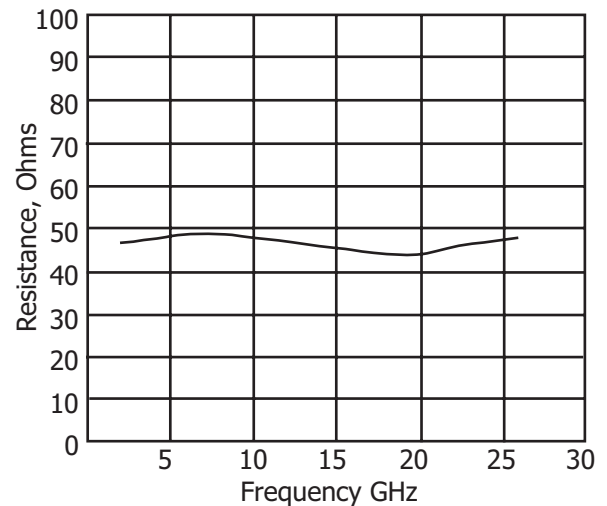
Terminations



Partial wraparound termination

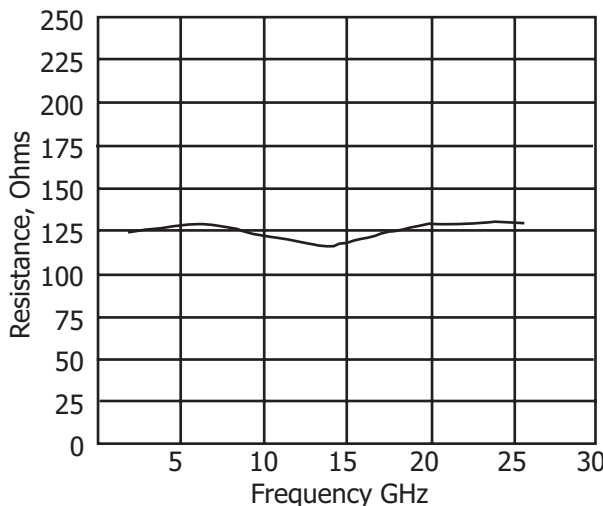
- 3 ✓ PtAg (Not available in 0302PW)
- C PtAg with 62/36/2 solder coating (Not available in 0302PW)
- P ✓ PtAg with 96/4 solder coating (Not available in 0302PW)
- 4 PtAu (0302PW only)
- D PtAu with 62/36/2 solder coating (0302PW Only)

Frequency Response of 50Ω Resistors from 2 GHz to 26.5 GHz



Two frequency response curves of the RCC-0502PW are included here to illustrate the flatness of the response of IMS' Partial Wrap devices. Measurements were taken at 50 Ω and 130 Ω covering the span that these devices are usually specified within.

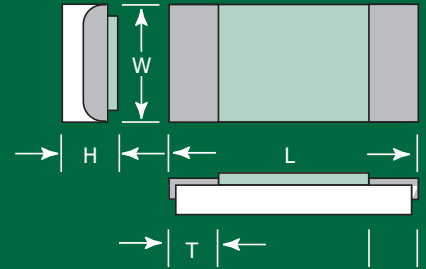
Frequency Response of 130Ω Resistors from 2 GHz to 26.5 GHz



The response does not change appreciably at different resistance values. Similar response can be expected from other size resistors within the PW series and within the resistance range for the respective size.

Dimensions

Part Number	Length	Width	Height	Terminal
RCX-0302PW	0.030 ± .005	0.020 ± .003	0.020 max.	0.004 min.
RCX-0402PW	0.040 ± .005	0.020 ± .005	0.020 max.	0.005 min.
RCX-0502PW	0.050 ± .005	0.020 ± .005	0.020 max.	0.009 min.
RCX-0603PW	0.060 ± .005	0.030 ± .005	0.020 max.	0.009 min.
RCX-0805PW	0.080 ± .005	0.050 ± .005	0.020 max.	0.015 min.



Specifications

	RCX-0302PW	RCX-0402PW	RCX-0502PW	RCX-0603PW	RCX-0805PW
Operating temp	-55 to 150°C	-55 to 150°C	-55 to 150°C	-55 to 150°C	-55 to 150°C
Rated Power (@70°C)	63 mW	80 mW	100 mW	100 mW	175 mW
Max working volts	50VDC	50VDC	50VDC	50VDC	150 VDC
Resistance range*	10Ω to 2KΩ	10Ω to 2KΩ	10Ω to 2KΩ	10Ω to 2KΩ	10Ω to 2KΩ
Tolerance	±5%	±5%, 2%, 1%	±5%, 2%, 1%	±5%, 2%, 1%	±5%, 2%, 1%
TCR (ppm/°C)	± 100	± 100	± 100	± 100	± 100
Frequency range**	≤ 40 GHz	≤ 36 GHz	≤ 26.5 GHz	≤ 15 GHz	≤ 8 GHz

* Other values available. Please contact factory.

** Frequency range in an impedance matched system.

Ordering Information

Example: 100Ω, 5%, 100mW, 0502 partial wrap resistor

RCC - 0502PW1000 J		
<ul style="list-style-type: none"> ✓ RC3 RCC ✓ RCP RCD*, RC4* *0302PW only 		Tolerance F - 1% G - 2% J - 5%
Form factor		Resistance value
0302PW 0402PW		The first three digits are significant values. The fourth is the number of zeroes following. The R indicates a decimal point for resistance values below 100Ω.
0502PW 0603PW		
0805PW		

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