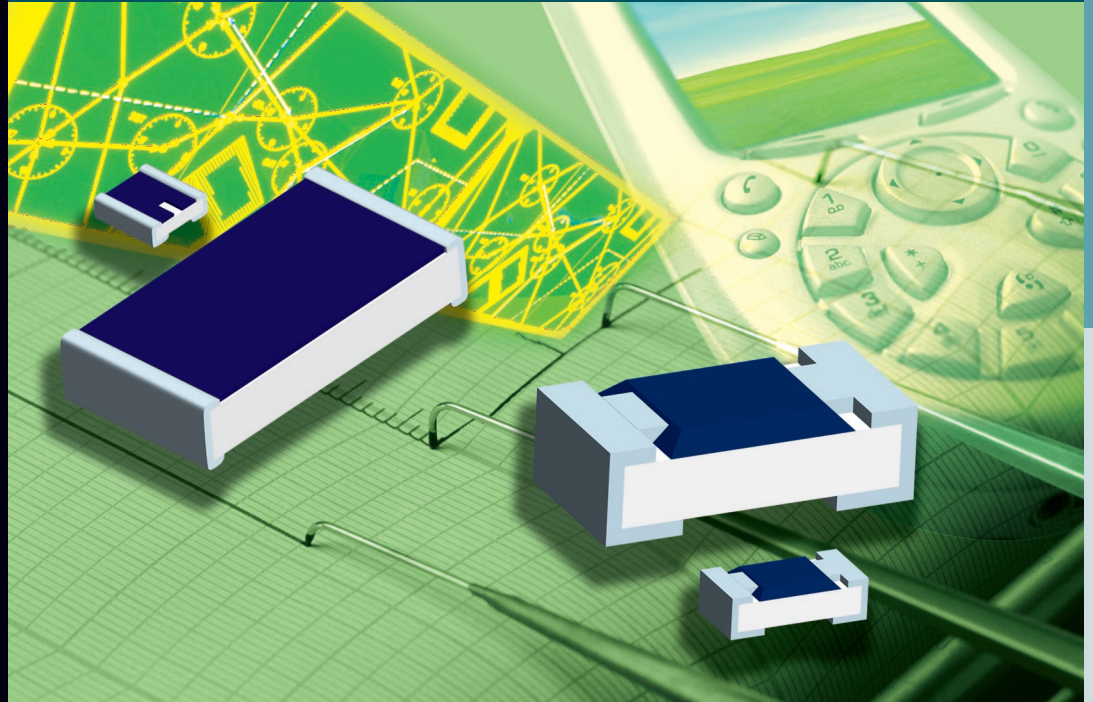




VISHAY INTERTECHNOLOGY, INC.



## THICK FILM CHIP RESISTORS

D.../CRCW/RCA

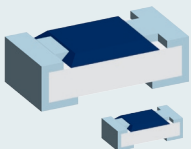
RCWP



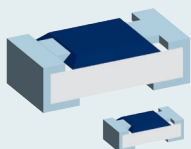
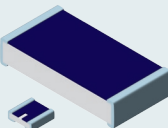
# Thick Film Chip Resistors

## Key Benefits

- A wide range of power ratings (0.04 W to 1 W)
- A wide resistance range (0.1  $\Omega$  to 470 M $\Omega$ )
- Low/high temperature performance (- 55  $^{\circ}\text{C}$  to + 150  $^{\circ}\text{C}$ )
- Tight tolerances (down to  $\pm 0.5\%$ )
- Low temperature coefficients (down to  $\pm 50$  ppm/ $^{\circ}\text{C}$ )
- Highly-stable Thick Film construction
- Anti-leaching nickel barrier termination

Product	Model	Wattage Rating	Resistance Range	TC (ppm/ $^{\circ}\text{C}$ )	Tolerance	Applications	
<b>D.../CRCW/RCA</b> (Automotive grade RCA series available in standard value ranges) 	CRCW0201	0.05	10 $\Omega$ - 1 M $\Omega$	$\leq 200$	$\pm 5\%$	<ul style="list-style-type: none"> <li>• Wire bonding/ conductive epoxy flip chip processes</li> <li>• Cellular phones</li> <li>• PDAs</li> <li>• Pagers</li> <li>• Hearing aids</li> <li>• Camcorders</li> <li>• Laptops</li> <li>• Calculators</li> <li>• Home entertainment</li> <li>• Power converters</li> <li>• RF</li> <li>• Automotive</li> <li>• Avionics</li> <li>• Space systems/ satellites</li> </ul>	
	CRCW0402 (D10)	0.063	10 $\Omega$ - 10 M $\Omega$	100	$\pm 1\%$		
	CRCW0603 (D11)	0.1	10 $\Omega$ - 10 M $\Omega$	200	$\pm 5\%$		
	CRCW0805 (D12)	0.125	10 $\Omega$ - 10 M $\Omega$	100	$\pm 1\%$		
	CRCW1206 (D25)	0.25	10 $\Omega$ - 10 M $\Omega$	200	$\pm 5\%$		
	CRCW1210	0.25	10 $\Omega$ - 10 M $\Omega$	100	$\pm 1\%$		
	CRCW1218	1.0	10 $\Omega$ - 10 M $\Omega$	200	$\pm 5\%$		
	CRCW2010	0.5	10 $\Omega$ - 10 M $\Omega$	100	$\pm 1\%$		
	CRCW2512	1.0	10 $\Omega$ - 10 M $\Omega$	200	$\pm 5\%$		
	<b>SPECIAL LOW-VALUE</b>						
	CRCW0402 (D10LR)	0.063	1 $\Omega$ - 9.76 $\Omega$	100	$\pm 1\%, \pm 5\%$		
			0.47 $\Omega$ - 0.91 $\Omega$	400	$\pm 5\%$		
			0.22 $\Omega$ - 0.43 $\Omega$	600	$\pm 5\%$		
	CRCW0603 (D11LR)	0.1	1 $\Omega$ - 9.76 $\Omega$	100	$\pm 1\%, \pm 5\%$		
			0.47 $\Omega$ - 0.91 $\Omega$	200	$\pm 5\%$		
		0.1 $\Omega$ - 0.43 $\Omega$	400	$\pm 5\%$			
CRCW0805 (D12LR)	0.125	1 $\Omega$ - 9.76 $\Omega$	100	$\pm 1\%, \pm 5\%$			
		0.47 $\Omega$ - 0.91 $\Omega$	200	$\pm 5\%$			
		0.1 $\Omega$ - 0.43 $\Omega$	300	$\pm 5\%$			
CRCW1206 (D25LR)	0.25	1 $\Omega$ - 9.76 $\Omega$	100	$\pm 1\%, \pm 5\%$			
		0.47 $\Omega$ - 0.91 $\Omega$	200	$\pm 5\%$			
		0.1 $\Omega$ - 0.43 $\Omega$	300	$\pm 5\%$			
CRCW1210	0.33	1 $\Omega$ - 9.76 $\Omega$	100	$\pm 1\%, \pm 5\%$			
		0.1 $\Omega$ - 0.91 $\Omega$	200	$\pm 5\%$			
CRCW1218	1.0	1 $\Omega$ - 9.76 $\Omega$	100	$\pm 1\%, \pm 5\%$			
		0.1 $\Omega$ - 0.91 $\Omega$	200	$\pm 5\%$			
CRCW2010	0.5	1 $\Omega$ - 9.76 $\Omega$	100	$\pm 1\%, \pm 5\%$			
		0.1 $\Omega$ - 0.91 $\Omega$	200	$\pm 5\%$			
CRCW2512	1.0	1 $\Omega$ - 9.76 $\Omega$	100	$\pm 1\%, \pm 5\%$			
		0.1 $\Omega$ - 0.91 $\Omega$	200	$\pm 5\%$			
<b>SPECIAL HIGH-VALUE</b>							
CRCW0603 (D11HR)	0.1	11M $\Omega$ - 470 M $\Omega$	500	$\pm 5\%$			
CRCW0805 (D12HR)	0.125	11M $\Omega$ - 470 M $\Omega$	500				
CRCW1206 (D25HR)	0.25	11M $\Omega$ - 470 M $\Omega$	500				



Product	Model	Wattage Rating	Resistance Range	TC (ppm/°C)	Tolerance	Applications
<b>D.../CRCW/RCA</b>	<b>SPECIAL PRECISION</b>					
(Automotive grade RCA series available in standard value ranges)  	CRCW0402 (D10P)	0.063	10 Ω - 1 MΩ	100	± 0.5 %	<ul style="list-style-type: none"> <li>• Wire bonding/ conductive epoxy flip chip processes</li> <li>• Cellular phones</li> <li>• PDAs</li> <li>• Pagers</li> <li>• Hearing aids</li> <li>• Camcorders</li> <li>• Laptops</li> <li>• Calculators</li> <li>• Home entertainment</li> <li>• Power converters</li> <li>• RF</li> <li>• Automotive</li> <li>• Avionics</li> <li>• Space systems/ satellites</li> </ul>
	CRCW0603 (D11P)	0.1	10 Ω - 10 MΩ	100		
	CRCW0805 (D12P)	0.125	10 Ω - 10 MΩ	100		
	CRCW1206 (D25P)	0.25	10 Ω - 10 MΩ	100		
	CRCW1210	0.33	100 Ω - 1 MΩ	100, 50		
	CRCW1218	1.0	100 Ω - 2.2 MΩ	100, 50		
	CRCW2010	0.5	10 Ω - 10 MΩ	100		
	CRCW2512	1.0	100 Ω - 10 MΩ	50		
	CRCW2512	1.0	100 Ω - 10 MΩ	50		
<b>RCWP</b>	RCWP0402	0.04	10 Ω - 1 MΩ	100	± 1 %, ± 2 %, ± 5 %, ± 10 % for 100 ppm/°C  ± 2 %, ± 5 %, ± 10 % for 300 ppm/°C	<ul style="list-style-type: none"> <li>• Custom design</li> <li>• Space systems</li> <li>• Satellites</li> <li>• Missiles</li> <li>• Medical</li> <li>• Avionics</li> </ul>
	RCWP0603	0.07	5.62 Ω - 1 MΩ	300		
	RCWP0540	0.08	3 Ω - 1 MΩ	300		
	RCWP0550	0.1	10 Ω - 499 KΩ	100		
	RCWP0575	0.15	3 Ω - 4.7 MΩ	300		
	RCWP5100	0.2	2 Ω - 4.7 MΩ	300		
	RCWP1206	0.25	5.62 Ω - 1 MΩ	100		
	RCWP5150	0.35	3 Ω - 15 MΩ	300		
	RCWP1100	0.5	5.62 Ω - 5.62 MΩ	100		
	RCWP7225	0.6	3 Ω - 15 MΩ	300		
	RCWP2010	0.8	5.62 Ω - 15 MΩ	100		
	RCWP2512	1.0	3 Ω - 20 MΩ	300		
	RCWP2512	1.0	5.62 Ω - 15 MΩ	100		
	RCWP2512	1.0	5 Ω - 20 MΩ	300		

For available Military Product (M55342 and D55342), consult Military Film SMD Resistors Selector Guide.

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