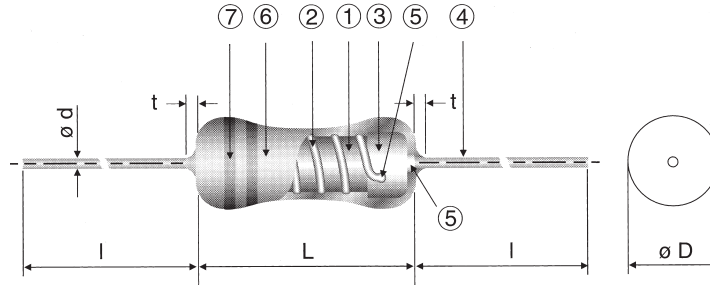


WIREWOUND MINIATURE TYPE CW(P)



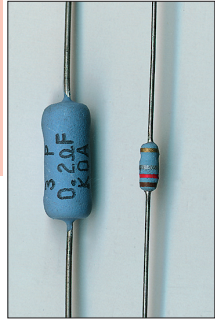
STRUCTURE

- 1 Ceramic core
- 2 Resistive element (wire)
- 3 Steel cap (Cu, Sn plated)
- 4 Lead wire
- 5 Welding joint
- 6 Silicon overcoating
- 7 Marking

IDENTIFICATION

PRODUCT CODE	COATING COLOR	MARKING
CW CW X CW P CW S	Blue	Color code (R-value and tolerance) Alpha Numeric (R-value and tolerance)
CW 1 SS	Black	Color code +2 silver lines

All these products have Pb-free terminations and meet EU-RoHS and China-RoHS requirements



TYPE DESIGNATION (HOW TO ORDER)

CW	2	P	C	T52	A	1471	F	Contact us when you have control request for environmental hazardous material other than the substance specified by EU-RoHS
PRODUCT CODE	POWER RATING Unit: Watt 1/4...5	STYLE Blank: Power type (R ≥ 0.1Ω) X: Power type (R < 0.1Ω) P: Precision type S: Small type SS: Small type, UL approved	TERMINATION SURFACE MATERIAL C: SnCu	TAPING & FORMING	PACKAGING A: Ammo	NOMINAL RESISTANCE C, D, F: 4 digits G, K, J: 3 digits	RESISTANCE TOLERANCE C, D, F, G, J, K	

*Please see "PACKAGING"

FEATURES

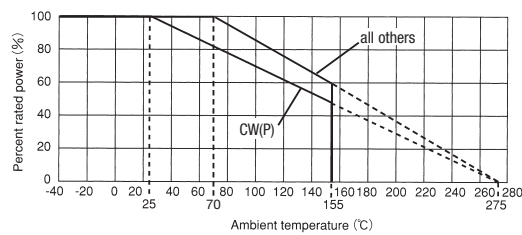
- Wirewound power and precision type resistor
- Complete welded construction
- Automatic insertion is applicable
- Various formings are available
- Excellent stability in operation
- CW1S = Reduced size type
- CW1SSCT52A100J has UL1412 approval
- Flame retardant coating (Equivalent to UL94 V-0)
- Rated ambient temperature: +70°C (CW-P-series = +25°C)
- Operating temperature range: -40°C ... +155°C

DIMENSIONS (mm)

TYPE	L	t Max.	ø D	ø d (nom.)	l ± 3*	
CW 1/4	3.3 ± 0.3	0.5	1.9 ± 0.3	0.45	30	
CW 1/2	6.5 ± 1.0	1	2.5 ± 1.0	0.6		
CW 1S (S)						
CW 1						
CW 1X	9.5 ± 1.0	3	3.5 ± 1.0	0.8		
CW 1P			3.5 ± 1.0			
CW 2	12 ± 1.0	3	4.0 ± 1.0			
CW 2X			4.0 ± 1.0			
CW 2P			4.0 ± 1.0			
CW 3	15 ± 1.0	3	6.0 ± 1.0			38
CW 3X			6.0 ± 1.0			
CW 3P			6.0 ± 1.0			
CW 5	24 ± 1.5	3	9.0 ± 1.5			

*Lead length changes depending on taping and forming type

DERATING CURVE



RATING

DIN SIZE	TYPE	T.C.R. (ppm/K)	POWER RATING*	MAX. WORKING VOLTAGE	MAX. OVERLOAD VOLTAGE	RESISTANCE RANGE AND TOLERANCE					
						E24 • E96			E24		
						C (±0.25%)	D (±0.5%)	F (±1%)	G (±2%)	J (±5%)	K (±10%)
0204	CW 1/4 C	± 250	0.25 W	E= √ P x R	E= √ P x R x 6.25	-	-	-	-	0.47Ω ... 15Ω	0.47Ω ... 15Ω
0207	CW 1/2 C		0.5 W			-	-	-	0.1Ω ... 100Ω	0.1Ω ... 100Ω	
0207	CW 1 S C		1 W			-	-	-	0.1Ω ... 100Ω	0.1Ω ... 100Ω	
NEW 0207	CW 1 SS C	± 100	1 W			-	-	-	10Ω	-	
0411	CW 1 C	± 250	1 W			-	-	0.1Ω ... 390Ω	0.1Ω ... 390Ω	-	-
0414	CW 2 C		2 W			-	-	0.1Ω ... 390Ω	0.1Ω ... 390Ω	-	-
0617	CW 3 C		3 W			-	-	0.1Ω ... 390Ω	0.1Ω ... 390Ω	-	-
0924	CW 5 C		5 W			-	-	0.1Ω ... 390Ω	0.1Ω ... 390Ω	-	-
0411	CW 1 X C		1 W			-	-	-	0.01Ω ... 0.091Ω	0.01Ω ... 0.091Ω	-
0414	CW 2 X C	± 500	2 W			-	-	-	0.01Ω ... 0.091Ω	0.01Ω ... 0.091Ω	-
0617	CW 3 X C		3 W	-	-	-	0.01Ω ... 0.091Ω	0.01Ω ... 0.091Ω	-	-	
0411	CW 1 P C		1 W	-	-	1Ω ... 100Ω	0.47Ω ... 220Ω	0.1Ω ... 430Ω	-	-	
0414	CW 2 P C	± 90 : R ≥ 10 Ω** ± 50 : R < 10 Ω	2 W	-	-	1Ω ... 390Ω	0.47Ω ... 390Ω	0.1Ω ... 390Ω	-	-	
0617	CW 3 P C	3 W	-	-	1Ω ... 390Ω	0.47Ω ... 390Ω	0.1Ω ... 390Ω	-	-		

* For resistors operated in higher ambient temperature than rated, power rating shall be derated (CW-P Series at +25°C, all others at +70°C). Please see above.

** CW P (R ≥ 10Ω): T.C.R. = 20 ppm/K available on request.

Rated voltage = √ Power Rating x Resistance value