

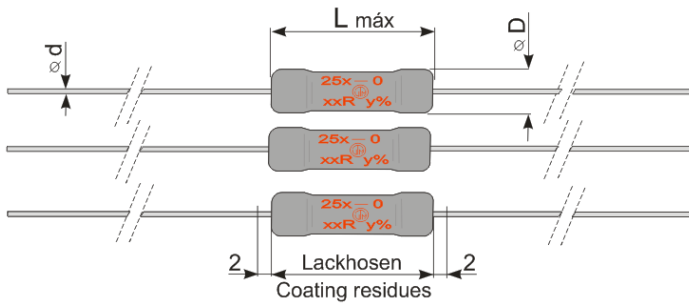
**Precision Power Wirewound Resistor**  
**Axial, Ceramic rod**  
**Flame retardant coating**



ELECTRICAL SPECIFICATIONS			CR 251-0	CR 252-0	CR 253-0	CR 254-0	CR 255-0	CR 256-0	CR 257-0	CR 258-0	CR 259-0
Type											
Nominal Power rating	P <sub>40</sub> P <sub>70</sub>	[W]	1,1 1,0	2,0 1,8	2,5 2,3	3,0 2,7	3,5 3,2	4,0 3,6	5,0 4,5	5,5 5,0	7,2 6,5
Resistance range		[Ω]	See next page (higher values upon request)								
E-Series			E24								
Tolerances		± [%]	Rmin. ...Rmax.: ±5, ±2, ±1; R ≥ 1R: ±0,5								
Temperature coefficient		[10 <sup>-6</sup> *K <sup>-1</sup> ]	*See table below								
Temperature range		[°C]	-55 ... 350								
Thermal resistance		[KW <sup>-1</sup> ]	280	155	127	103	93	77	62	56	43
Dielectric withstanding voltage <i>IEC115-1 clause 4.7 (1[min])</i>		[V]	max 500								
Max. working voltage		[V] <sub>RMS</sub>	$\sqrt{P_{70} * R}$								

PERFORMANCE DATA			
Derating linear		[°C]	70...350 (0W)
Climatic category			55/200/56
Failure Rate <i>(Total, 90%, max, 60% cont. lev.)</i>		[10 <sup>-9</sup> h <sup>-1</sup> ]	appr. 100 depends on value
Endurance <i>IEC60115-1 clause 4.25 (P<sub>70</sub>, @ 70[°C], 1000[h])</i>		± [%]	3,0
Damp heat, steady state <i>IEC115-1 clause 4.24 (40[°C], 93[% r.h.], 56[d])</i>		± [%]	1,0
Climatic sequence <i>IEC115-1 clause 4.23</i>		± [%]	1,0
Terminal strength		± [%]	0,2
Terminal Tensile Strength		[N]	50
Resistance to soldering heat <i>IEC115-1 clause 4.18 (260<sup>±5</sup>[°C], 3,5<sup>±1</sup>[s])</i>		± [%]	0,2
Solderability <i>IEC 60068-2-20-T (245<sup>±5</sup>[°C], 3<sup>±0,5</sup>[s])</i>			Solder bath method (> 95% coverage)
Marking <i>IEC60062</i>			Printed in clear

**DIMENSIONS [mm]**



Type	L max	Ø D max *	Ø d
CR251-0	9,0	3,0	0,65
CR252-0	9,7	4,0	0,80
CR253-0	14,5	4,5	0,65
CR254-0	12,6	5,5	0,80
CR255-0	15,0	8,5	0,80
CR256-0	17,0	5,5	0,80
CR257-0	18,0	8,5	0,80
CR258-0	22,0	8,5	0,80
CR259-0	27,0	8,5	0,80

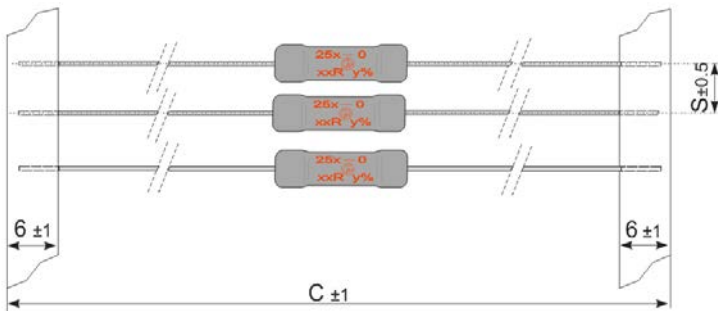
\*R ≤ 1R Dmax. +1

**TEMPERATURE COEFFICIENT**

Type	Temperature Coefficient ( -20°C to 120°C )									
	500 +400 ppm/K		400 ± 50 ppm/K		appr. +180 ppm/K		0 ± 20 ppm/K		0 ± 10 ppm/K	
CR251-0	-----	-----	≥ 0R01	≤ 0R024	≥ 0R027	≤ 0R091	≥ 0R1	≤ 15R	≥ 16R	≤ 220R
CR252-0	≥ 0R022	≤ 0R033	≥ 0R036	≤ 0R062	≥ 0R068	≤ 0R091	≥ 0R1	≥ 160R	≥ 180R	≤ 470R
CR253-0	≥ 0R01	≤ 0R02	≥ 0R022	≤ 0R047	≥ 0R051	≤ 0R091	≥ 0R1	≤ 47R	≥ 51R	≤ 750R
CR254-0	≥ 0R01	≤ 0R027	≥ 0R03	≤ 0R075	≥ 0R082	≤ 0R091	≥ 0R1	≤ 47R	≥ 51R	≤ 1K8
CR255-0	≥ 0R015	≤ 0R024	≥ 0R027	≤ 0R062	≥ 0R068	≤ 0R091	≥ 0R1	≤ 68R	≥ 75R	≤ 1K0
CR256-0	≥ 0R02	≤ 0R03	≥ 0R033	≤ 0R062	≥ 0R068	≤ 0R091	≥ 0R1	≤ 130R	≥ 150R	≤ 1K5
CR257-0	≥ 0R027	≤ 0R047	≥ 0R051	≤ 0R082	≥ 0R091	≤ 0R13	≥ 0R15	≤ 150R	≥ 160R	≤ 5K1
CR258-0	≥ 0R033	≤ 0R062	≥ 0R068	≤ 0R13	≥ 0R15	≤ 0R16	≥ 0R18	≤ 160R	≥ 180R	≤ 2K7
CR259-0	≥ 0R047	≤ 0R075	≥ 0R082	≤ 0R15	≥ 0R16	≤ 0R24	≥ 0R27	≤ 180R	≥ 200R	≤ 3K9

**PACKAGING**

The standard packaging for CR in axial type is taped, dimensions below.



Type	Packaging	Pieces	Pack. Code	C	S
CR251-0	Taped / Ammo pack	1000	T	65	5
CR252-0		1000		65	5
CR253-0		1000		85	10
CR254-0		1000		85	10
CR255-0		500		85	10
CR256-0		1000		85	10
CR257-0		500		85	10
CR258-0		500		85	10
CR259-0		500		85	10

**ALTERNATIVE LEAD CONFIGURATIONS**

This type CR, is also available in a different pre-forming, as shown below, other's upon request.

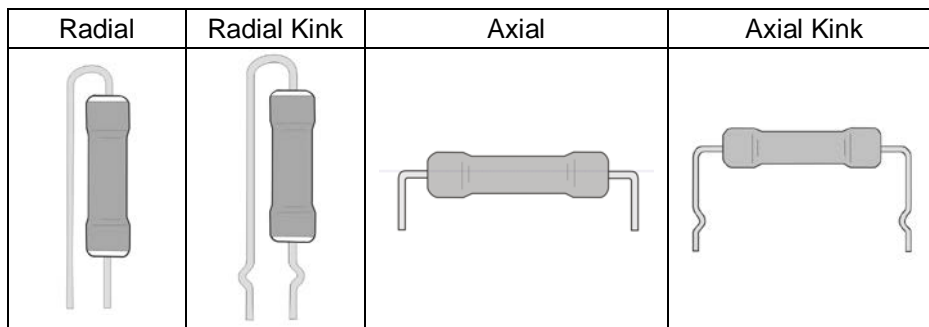
**SMD VERSION**

Z – form



Please check the details here [Series RZC](#)

**THROUGH HOLE VERSION**



\*For horizontal and vertical pre-forming please consult your local sales contact.

**ORDERING EXAMPLE**

CR254-0	5	T	150R
Type	Tolerance	Pack-Code	R-Value
	D = 0,5 [%]	T = Taped in Ammo Pack	0R1 = 0.1 Ohm
	1 = 1 [%]		1R = 1.0 Ohm
	2 = 2 [%]		1K = 1.000 Ohm
	5 = 5 [%]		

Not every combination of codes is available please refer to the facts above or ask your sales partner