

Wirewound resistor coated with vitreous enamel

RSA

Description

Submerged collars, Designed for severe environment condition

Mechanical characteristics

IP00, Soldering terminals, Cylindrical shape

Applications

Harmonic filter, Neutral grounding, Charge/discharge capacitor, Heating

Market

Railways, Industrial automation, Energy

Special version

Ohmic values out of range, Special tolerance on resistance (2%, 1%), Adjustable version, Low inductance, Intermediate grip

Active materials

Depending on the ohmic value the used alloy may be NiCr or CuNi44



25 W ÷ 300 W



ELECTRICAL CHARACTERISTICS

refers to room temperature 25°C

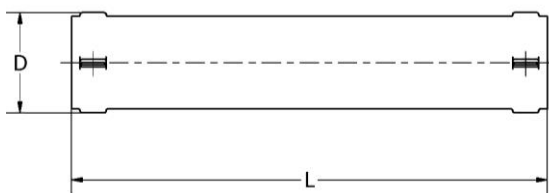
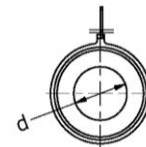
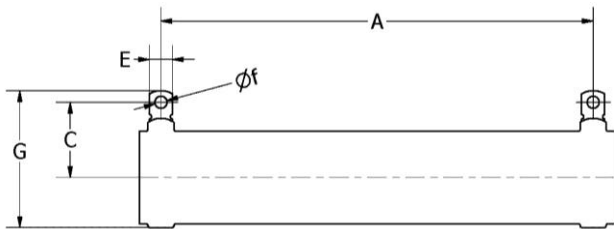
ID	Rated Power	Min Resistance	Max Resistance	Min res.not-inductive version	Max res.not-inductive version	Max resistance for traction	Limit Voltage
Unit	W	Ω	Ω	Ω	Ω	Ω	V
RSA 25	25	3	12k	12	3k	6k5	700
RSA 26	26	4,3	18k	18	4k7	10k	700
RSA 36	36	5,6	24k	22	5k6	12k	1000
RSA 50	50	8,2	33k	33	8k2	18k	1500
RSA 52	52	8,2	33k	33	8k2	18k	1500
RSA 65	65	7,5	43k	30	11k	23k	1800
RSA 75	75	9,1	56k	39	13k	30k	1800
RSA 90	90	11	62k	43	16k	35k	1800
RSA 100	100	13	82k	56	20k	45k	2000
RSA 150	150	20	91k	82	30k	65k	2000
RSA 200	200	27	91k	110	43k	90k	2500
RSA 250	250	36	91k	150	56k	120k	3000
RSA 300	300	43	91k	160	62k	135k	3000
Insulation resistance 500 VDC		≥100 MΩ		Temp. Coefficient Resistance		40±240 10 ⁻⁶ /°C	
Max Overload 10" / 5"		5xPr / 10xPr		Dielectric strength 50Hz; 60"		1000 V	
TEST	Conditions	Requirements		Tipycal value and drifts			
Short time overload	10 Pr during 5 sec. Max Voltage 6.000 V or 2.5 times the limit voltage	2% ±0,05 ohm		0,5%			
Climatic sequence	-55°C+200°C 5 Cycles MIL STD 202 Test 107 D	3%±0,05 ohm Insulation Resistance>100MΩ		0,5%			
Humidity (steady state)	56 Days at 95% RH	2% Insulation Resistance>100MΩ		0,5%			
Moisture	10 Cicles 55°C -10°C Rel umidity 95% ÷ 100% MIL STD 202 Test 106 D	2% Insulation Resistance 100MΩ		0,5%			
Load life	Cycle 90° on – 30° off 1.000 h a Pr and 25°C	5%		1,5%			
Salt spray	Procedure MIL STD 202 Test 101 D	No Pollutions or corrosion		OK			
Terminals strenght	Traction 40 N Torque 60 Ncm	Resistance 1%±0,05 ohm		<0,2%			

MECHANICAL DATA

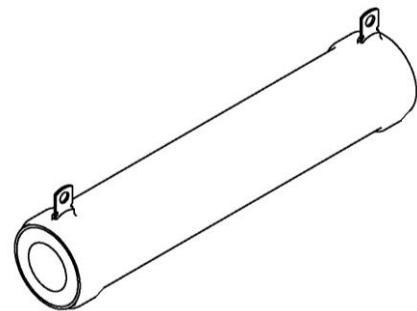
Dimensions [mm]	A	C	D	E	d	f	G	L	BRACKETS	Weight [g]
RSA 25	38	17	15,5	6	8,2	3,2	27,8	51	SQ/SC 13	18
RSA 26	51	16	14,5	6	7	3,2	26,3	64	SQ/SC 10	18
RSA 36	63	17	15,5	6	8,2	3,2	27,8	76	SQ/SC 13	24
RSA 50	89	17	15,5	6	8,2	3,2	27,8	102	SQ/SC 13	37
RSA 52	77	19	17,5	6	9,5	3,2	30,8	90	SQ/SC 20	42
RSA 65	85	26	21,5	8	9,5	4,2	40,8	100	SQ/SC 20	70
RSA 75	139	17	14,5	6	8,2	3,2	27,8	152	SQ/SC 13	57
RSA 90	85	30	31,5	8	18,5	4,2	49,8	100	SQ/SC 30	120
RSA 100	150	26	21,5	8	13	4,2	40,8	165	SQ/SC 23	88
RSA 150	150	30	31,5	8	18,5	4,2	49,8	165	SQ/SC 30	185
RSA 200	200	30	31,5	8	18,5	4,2	49,8	215	SQ/SC 30	235
RSA 250	250	30	31,5	8	18,5	4,2	49,8	265	SQ/SC 30	300
RSA 300	285	30	31,5	8	18,5	4,2	49,8	300	SQ/SC 30	360

DRAWING

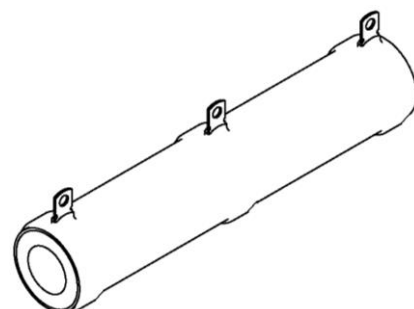
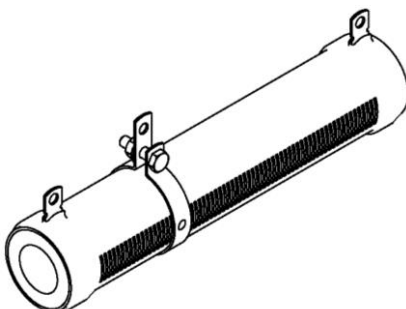
Unless otherwise specified, applicable standard of general tolerances for linear and angular dimensions is ISO 2768-1 class c; applicable standard for ceramic parts is DIN 40680-1 (general dimension) class g and DIN 40680-22 (shape) class g.



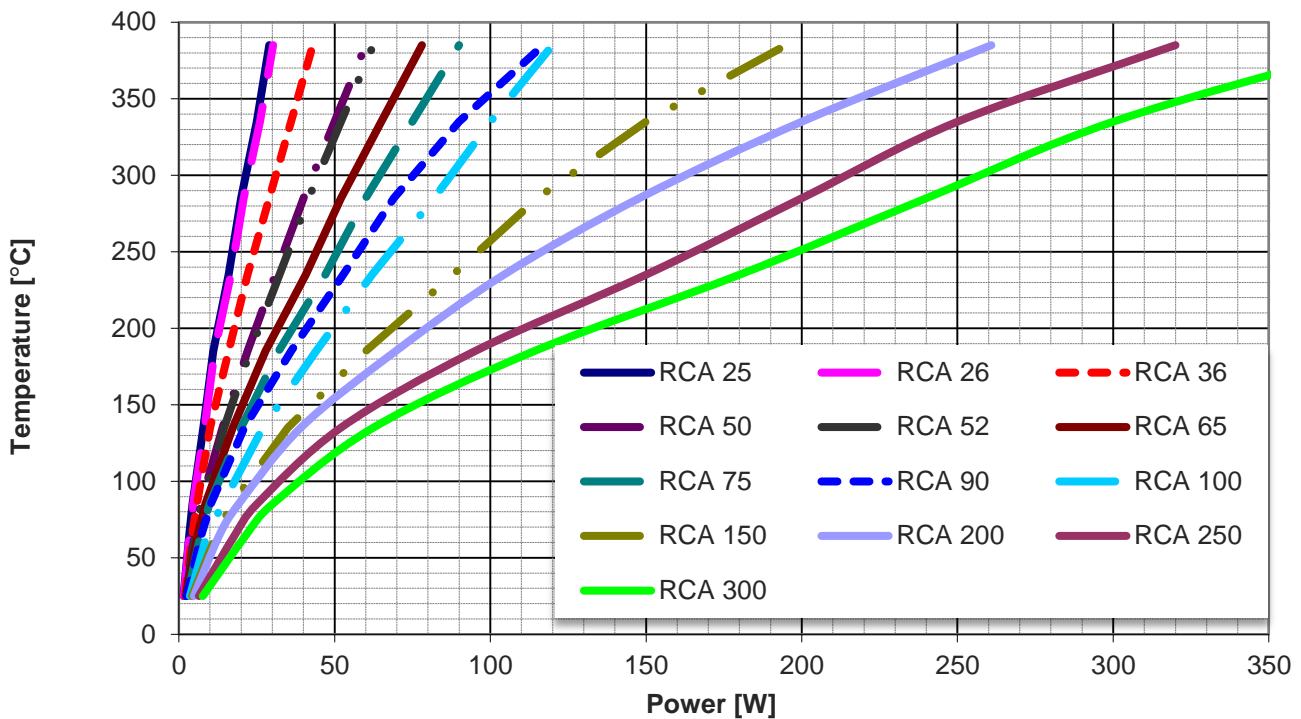
ADJUSTABLE VERSION



INTERMEDIATE GRIP



SURFACE TEMPERATURE CHARACTERISTIC



Except where stated otherwise, Rated power is given at 20 °C ambient temperature. The maximum power that can be dissipated decreases with the increase of ambient temperature. Derating drops to zero at 350°C ambient temperature from nominal rating at 25%.

Marking

The resistor is marked on the collar with indelible ink high temperature

FAIRFIELD RSA 300 150R 5% WW/YY (week / year)

Packing

The resistor is packed in a way to preserve incidental damages due to transport. The resistor is made by ceramic parts, accidental fall can damage it, handle with care.

Disclaimer

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Ordering information

RSA/Y XXX RRRR 5%

Y N : not inductive version

R : adjustable version

P : intermediate grip

XXX Model / Rated power i.e. 300 : 300 W

RRRR Resistance value (nominal at 20°C)

Example

RSA 300 150R 5%

RSA is the name of the product

300 is the model that corresponds, for RCA family, to the rated power, in this case 300 W

150R means 150 Ω that is the nominal ohmic value at 20°C

5% is the tolerance on the ohmic value, in this case the value of the resistor is accepted when is within 142.5 Ω ± 157.5 Ω

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