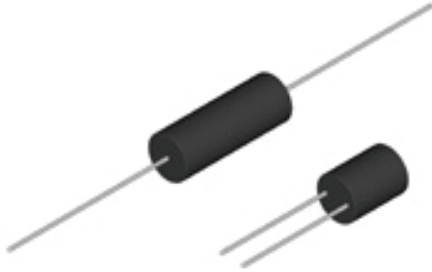


Resistors

Precision - Wire Wound Resistor

Astro 9X and 5X series



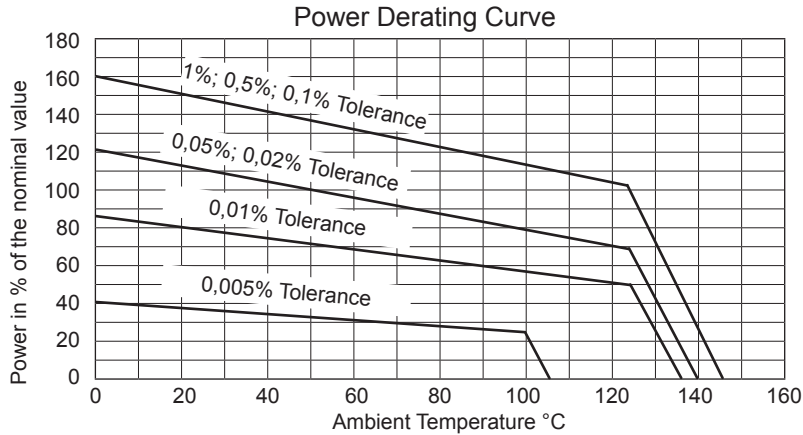
- Any Resistance from 0,01Ω - 6MΩ
- Best Resistance Tolerance 0,005%
- Temperature Coefficient ±5 ppm/K
- Non - Inductance Type (Option)
- Matched Sets with ±0,001% and ±0,5 ppm/A
- Special Lead Wire Bending (Option)

Specifications	9005	9007	9010/R*	9030/R*	9040	9050	5100*	5125*	5250*	5700*
Resistance Range (Ω)	0,01 - 150k	0,01 - 750k	0,01 - 1,2M	0,01 - 2,5M	0,01 - 6M	0,01 - 6M	0,01 - 500k	0,01 - 600k	0,01 - 800k	0,01 - 1M
Power Rating (70°C)	0,08	0,175	0,25	0,5	0,75	1,0	0,125	0,25	0,4	0,5
Dielectric	200 VDC	200 VDC	300 VDC	400 VDC	600 VDC	800 VDC	150 VDC	150 VDC	150 VDC	300 VDC
Tolerances			0,1% 0,05% 0,01% 0,005%; 0,001%	> 0,01Ω > 0,1Ω > 1Ω > 100Ω						
Temperature Coefficient			±10ppm ±20ppm ±30ppm	>100Ω 10Ω - 100Ω <10Ω						
										*Version with radial leads

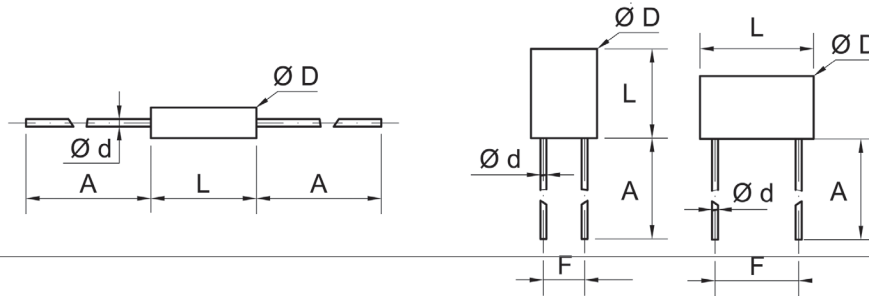
Mechanical Data

Resistance Element	Wire / Special Alloy
Bobbin	Multi - Chamber Coil
Housing	Epoxy - Coated
Leads	Tin plated Copper

Test	Condition	
Thermal Shock	-65°C/30 min., +125°C/30 min., 5 Cycles	±0,05%
Short Time Overload	2x Related Power, 10 min.	±0,01%
Solderability	230°C, 5 sec.	> 95% covered
Soldering Heat Resistance	350°C, 3 sec.	±0,01%
Insulation Resistance	100 VDC, 2 min.	über 1.000 MΩ
Shock	50G, 11 ms, half sinusoidal	±0,01%
Vibration, High Frequency	20G, 10Hz-55Hz-10Hz, 3 min.	±0,01%
Stability	1x Related Power at 0°C-125°C, 1,5h ON, 0,5h OFF, 1000h	±0,005% (typically)
Storage Life	1 Year without load	±0,005%



Technical Drawing



Dimensions	9005	9007	9010/R*	9030/R*	9040	9050	5100*	5125*	5250*	5700*
A (±1,5)	38,0	38,0	38,0	38,0	38,0	38,0	25,0	25,0	25,0	25,0
L (±0,7)	6,6	9,5	12,7	19,1	25,4	25,4	7,9	7,9	12,7	12,7
D (±0,2)	3,2	4,7	6,4	9,5	9,5	12,7	6,4	6,4	9,5	12,7
F (±0,4)							5,1	5,1	5,1	7,6
d (±0,05)	0,5	0,6	0,8	0,8	0,8	0,8	0,6	0,6	0,8	0,8

*Version with radial leads, all Dimensions in mm

Options

Remark

Non- Inductive Winding, (upon request)	Attention, divide max. resistance by 2, TCR: 120ppm
Special Lead Wire Bending	
Improved Stability	
Special Temperature Coefficients	Low: max. 5ppm, High: max 6000ppm/K

Ordering Information

Astro 5100 Type	W0,1% Resistance Tolerance 0,1%; 0,05%; 0,01% 0,005%; 0,001%	TK5 Temperature Coefficient ±10ppm; ±20ppm; ±30ppm	10k000 Resistance Value (0,01Ω - 6MΩ)
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