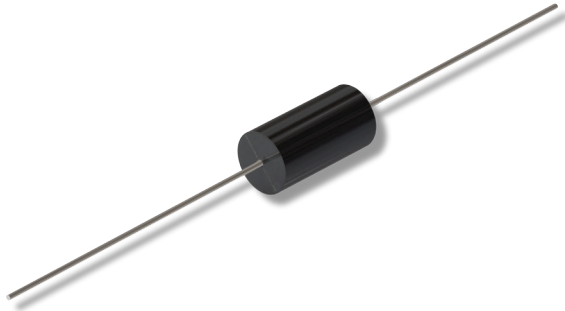


Resistors

Precision - Wire Wound Resistor

Astro 2000 series



- Any Resistance from 0,01Ω - 6MΩ
- Best Resistance Tolerance 0,005%
- Temperature Coefficient ±1 ppm/K
- Non - Inductance Type (Option)
- Matched Sets with ±0,001% and ±0,5 ppm/A
- Special Lead Wire Bending (Option)

Specifications	2015	2100	2110	2200	2500	2600	2800
Resistance Range (Ω)	0,01 - 750k	0,01 - 800k	0,01 - 1,2M	0,01 - 2,5M	0,01 - 3,8M	0,01 - 6M	0,01 - 6M
Power Rating (70°C)	0,175 Watts	0,2 Watts	0,25 Watts	0,33 Watts	0,5 Watts	1,0 Watts	1,5 Watts
Dielectric	200 VDC	200 VDC	300 VDC	400 VDC	400 VDC	800 VDC	800 VDC
Best Tolerances			0,1% > 0,01Ω 0,05% > 0,1Ω 0,01% > 1Ω 0,005%; 0,001% > 100Ω				
Temperature Coefficient			±10ppm >100Ω ±20ppm 10Ω - 100Ω ±30ppm 1Ω - 10Ω ±90ppm <1Ω				

Mechanical Data

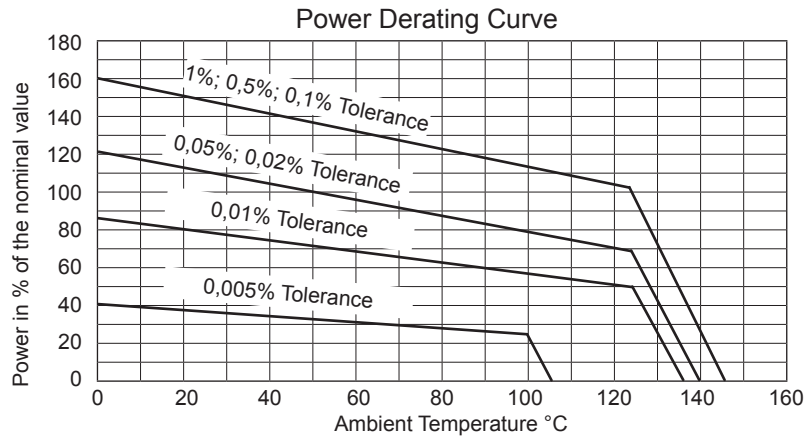
Resistance Element	Wire / Special Alloy
Bobbin	Multi - Chamber Coil
Housing	Epoxy - Coated
Leads	Tin plated Copper

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%

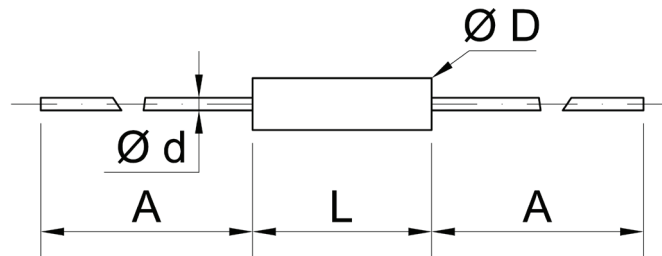
Resistors

Precision - Wire Wound Resistor

Astro 2000 series



Technical Drawing



Dimensions (mm)	A (min)	L (±0,7)	D (±0,2)	d
2015	38,0	9,5	4,8	0,64
2100	38,0	9,5	6,35	0,81
2110	38,0	12,7	6,35	0,81
2200	38,0	19,1	6,35	0,81
2500	38,0	19,1	12,7	0,81
2600	38,0	25,4	12,7	0,81
2800	38,0	38,1	12,7	0,81

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 Coefficient	Up to TK 6000ppmK

Ordering Information			
Astro 2800 Type	W0,1% Resistance Tolerance 1%; 0,5%; 0,3%; 0,1%; 0,05%; 0,02%, 0,025%; 0,01%; 0,005%; 0,001%	TK5 Temperature Coefficient ±10ppm; ±20ppm; ±30ppm; ±90ppm	10k000 Resistance Value (0,01Ω - 6MΩ)