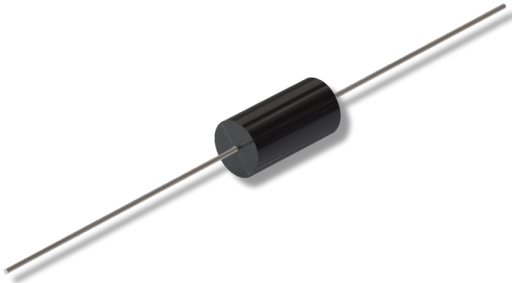


Data Sheet for Precision Resistors

Wirewound Resistor

Series ASTRO2



- Resistance range from 0,01..6MΩ
- Exact values up to 0.005% resistance tolerance
- Temperature coefficients up to ± 10 ppm/°C (on request up to ± 1 ppm/°C)
- Resistance sets up to $\pm 0.001\%$ and ± 0.5 ppm/°C
- On request, special lead wire bending
- Stable for a long time ± 100 ppm/year (on request in a very stable version with ± 20 ppm / year)
- On request with Balco or platinum connectors for high TC values
- On request in very high or low TC configurations from -20 ppm/°C to $+6000$ ppm/°C

Electrical Specification	ASTRO2								
	005	015	100	110	200	500	040	600	800
Resistance range from 0,01Ω..	..150kΩ	..750kΩ	..1MΩ	..1,2MΩ	..2,5MΩ	..3,8MΩ	..6MΩ	..6MΩ	..6MΩ
Resistance tolerance	$\pm 0,005\%.. \pm 0,1\%$								
Power rating (0W @ max. +145°C - see derating curve)	0,08W	0,175W	0,2W	0,25W	0,33W	0,5W	0,75W	1W	1,5W
Max. working voltage	100V	200V		300V	400V		600V	800V	900V
TCR-rate	± 10 ppm/°C @ R > 100Ω ± 20 ppm/°C @ R = 10Ω..100Ω ± 30 ppm/°C @ R = 5Ω..10Ω ± 50 ppm/°C @ R = 1Ω..5Ω ± 90 ppm/°C.. ± 150 ppm/°C @ R < 1Ω								
Working temperature range (max.)	-55..+145°C								

Mechanical Specification

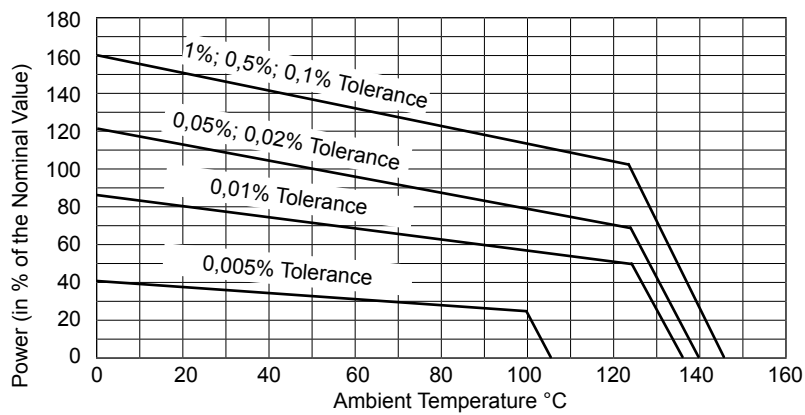
Resistance technology / material	Wirewound / wire alloy
Housing material	Epoxy moulded
Connections	Axial cooper tinned

Data Sheet for Precision Resistors

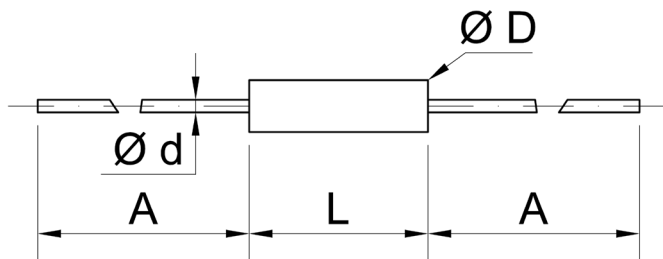
Wirewound Resistor

Series ASTRO2

Power Derating Curve



Technical Drawing



ASTRO2	A (min.)	L ($\pm 0,64$ mm)	$\text{Ø} D$ ($\pm 0,13$ mm)	$\text{Ø} d$ ($\pm 0,05$ mm)
005	38,0 mm	6,6 mm	3,2 mm	0,5 mm
015	38,0 mm	9,5 mm	4,7 mm	0,6 mm
100	38,0 mm	9,5 mm	6,4 mm	0,8 mm
110	38,0 mm	12,7 mm	6,4 mm	0,8 mm
200	38,0 mm	19,1 mm	6,4 mm	0,8 mm
500	38,0 mm	19,1 mm	9,5 mm	0,8 mm
040	38,0 mm	25,4 mm	9,5 mm	0,8 mm
600	38,0 mm	25,4 mm	12,7 mm	0,8 mm
800	38,0 mm	38,1 mm	12,7 mm	0,8 mm

Data Sheet for Precision Resistors

Wirewound Resistor

Series ASTRO2

Order code					
Description		Selection: standard=black/bold, possible options=grey/cursive			
Series:	ASTRO2				
Type / size:					
005 (max. 150kΩ)		005			
015 (max. 750kΩ)		015			
100 (max. 1MΩ)		100			
110 (max. 1,2MΩ)		110			
200 (max. 2,5MΩ)		200			
500 (max. 3,8MΩ)		500			
040 (max. 6MΩ)		040			
600 (max. 6MΩ)		600			
800 (max. 6MΩ)		800			
Resistance tolerance:					
±0,1% @ R >0,01Ω				W0,1%	
±0,05% @ R >0,1Ω				W0,05%	
±0,01% @ R >1Ω				W0,01%	
±0,005% @ R >100Ω				W0,005%	
±0,001% @ R >100Ω				W0,001%	
Temperature coefficient:					
±10ppm/°C @ R > 100Ω					TK10
±20ppm/°C @ R = 10Ω..100Ω					TK20
±30ppm/°C @ R = 5Ω..10Ω					TK30
±50ppm/°C @ R = 1Ω..5Ω					TK50
<i>Option ±90ppm/°C..±150ppm/°C @ R < 1Ω</i>					<i>TK90</i>
Resistance value - please choose:					
From 0,01Ω to ≤ see type					xxxxkxxx

Order Example	Series	Type	Resistance tolerance	Temperature coefficient	Resistance value
Choice	ASTRO2	200	±0,1%	10ppm/°C	10,1kΩ
Code	ASTRO2	200	W0,1%	TK10	10k100