

Data Sheet for Precision Resistor

Power Resistor (wirewound)

Series SUT



- Power ratings up to 15 Watts
- Compact design
- Good pulse handling
- Resistor tolerances from 0,01% bis 10%
- TCR up to ± 20 ppm/ $^{\circ}$ C
- Non-inductive windings (Option)
- Resistance range from 0,01 Ω ..260k Ω

Electrical Specification	SUT						
	1*	2*	3*	5	7*	10	12
Resistance range from 0,01 Ω3,4k Ω	..7,5k Ω	..12,5k Ω	..32k Ω	..95k Ω	..150k Ω	..260k Ω
Resistance tolerance	$\pm 0,01\%$.. $\pm 10\%$						
Power rating (0W @ +250 $^{\circ}$ C)	1W	1,5W	3W	5W	7W	10W	15W
Max. working voltage	33V	42V	135V	194V	425V	607V	1050V
TCR-rate	± 20 ppm/ $^{\circ}$ C @ R > 10 Ω ± 50 ppm/ $^{\circ}$ C @ R = 1 Ω ..10 Ω ± 90 ppm/ $^{\circ}$ C @ R < 1 Ω						
Working temperature range (max.)	-55..+250 $^{\circ}$ C						
*MIL-R-26 / MIL-R-39007	RW-81	RW-82	RW-80	--	RW-84	--	--

Mechanical Specification	
Resistance technology / material	Wirewound / wire alloy
Housing material	Inorganic Silicone
Connections	Axial cooper tinned

Parameters	Test Conditions (MIL-STD 202)	Specification ΔR
Dielectric	See norm	$\pm 0,2\%$ +0,05 Ω
Load life	See norm	$\pm 1\%$ dep. on resistance value
Storage	See norm	$\pm 0,2\%$ +0,05 Ω
Moisture resistance	See norm	$\pm 0,2\%$ +0,05 Ω
Thermal shock	See norm	$\pm 0,2\%$ +0,05 Ω
5X Overload (5s)	See norm	$\pm 0,2\%$ +0,05 Ω
Shock	See norm	$\pm 0,1\%$ + 0,05 Ω
Vibration	See norm	$\pm 0,1\%$ + 0,05 Ω

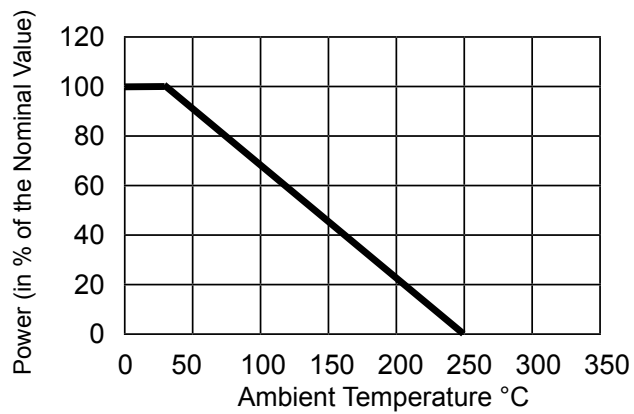
Dielectric strength: 1000 VAC (500 VAC @ SUT1, SUT2)

Data Sheet for Precision Resistor

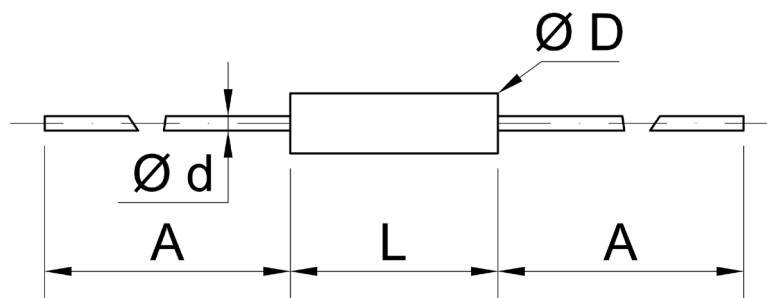
Power Resistor (wirewound)

Series SUT

Power Derating Curve



Technical Drawing



SUT	A (min.)	L ($\pm 1,6$)	$\varnothing D$ ($\pm 0,8$)	d ($\pm 0,05$)
1	25,4	6,4	2,2	0,5
2	25,4	7,9	2,0	0,5
3	25,4	8,9	4,0	0,8
5	25,4	12,7	6,4	1,0
7	25,4	22,2	7,9	1,0
10	25,4	31,0	7,9	1,0
12	25,4	45,2	9,5	1,0

Dimensions in mm

Data Sheet for Precision Resistor

Power Resistor (wirewound)

Series SUT

Order code						
Description		Selection: standard=black/bold, possible options=grey/cursive				
Series:	SUT					
Type / size:						
1 (max. 3,4kΩ)		1				
2 (max. 7,5kΩ)		2				
3 (max. 12,5kΩ)		3				
5 (max. 32kΩ)		5				
7 (max. 95kΩ)		7				
10 (max. 150kΩ)		10				
12 (max. 260kΩ)		12				
Resistance tolerance:						
±0,02%			W0,02%			
±0,05%			W0,05%			
±0,1%			W0,1%			
±0,25%			W0,25%			
±0,5%			W0,5%			
±1%			W1%			
±5			W5%			
±10%			W10%			
<i>Option ±0,01%</i>			<i>W0,01%</i>			
Temperature coefficient:						
±20ppm/°C @ R >10Ω				TK20		
±50ppm/°C @ R =1Ω..10Ω				TK50		
<i>Option ±90ppm/°C @ R <1Ω</i>				<i>TK90</i>		
Resistance value - please choose:						
From 0,01Ω bis ≤ see type					xxxkxxx	
<i>Option non-inductive windings:</i>						
<i>max. resistance value / 2</i>						<i>N</i>

Order Example	Series	Type	Resistance tolerance	Temperature coefficient	Resistance value	Inductance
Choice	SUT	3	±0,1%	20ppm/°C	10,1kΩ	Standard
Code	SUT	3	W0,1%	TK20	10k100	-