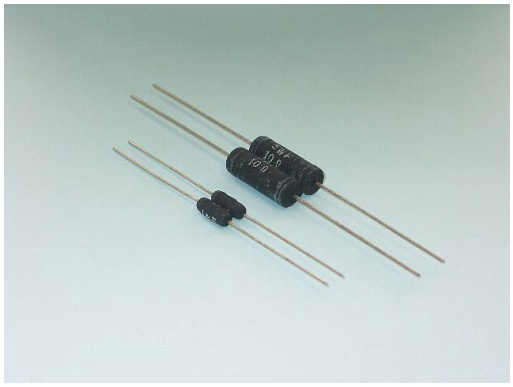
POWER SOLUTION - NIKKOHM

1W to 14W AXIAL LEAD WIRE WOUND RESISTORS

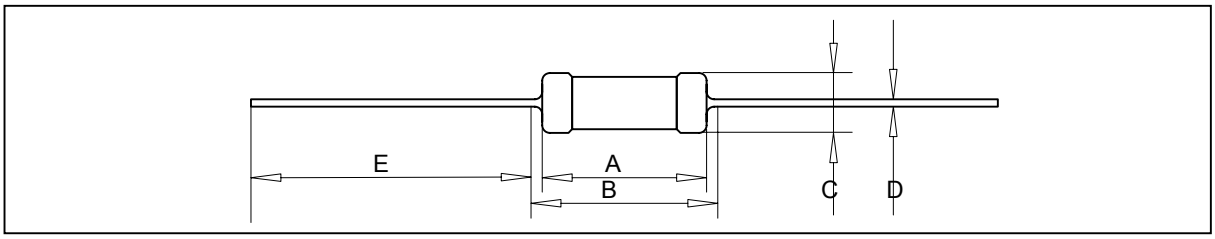
ARW



Features and Applications

Precision wire wound fixed resistor from 0.5W to 10W rating power.
Operating temperature range from –55C to 275C are performed by using strong silicone resin.
Welding structure and high purity ceramic core assures long life stability.
Strong over load characteristics are fit for applications of industrial power electronics, industrial measurements, automatic testing, switching power supplies, motor control electronics, rush current protection in automotive electronics, industrial power supplies.

Dimensions (mm)



Type	Rating Power	Working Voltage	A	B	C	D	E
ARW0.5	1.0W(0.5W)	20V	10.0+/-1.5	12.0 Max.	3.3+/-1.0	0.7+/-0.06	37+/-1.0
ARW1	2.0W(1.0W)	50V	12.0+/-1.5	14.0 Max.	4.0+/-1.0	0.8+/-0.06	37+/-1.0
ARW2	3.0W(2.0W)	100V	13.8+/-1.5	15.8 Max.	4.7+/-1.0	0.8+/-0.06	35+/-1.0
ARW3	5.0W(3.0W)	200V	15.7+/-1.5	17.7 Max.	5.9+/-1.0	0.8+/-0.06	35+/-1.0
ARW5	7.0W(5.0W)	400V	22.5+/-1.5	25.4 Max.	8.52+/-1.0	1.0+/-0.06	44+/-1.0
ARW7	10.0W(7.0W)	450V	24.5+/-1.5	26.5 Max.	8.52+/-1.0	1.0+/-0.06	44+/-1.0
ARW-10S	14.0W(10W)	700V	39.8+/-1.5	41.8 Max.	8.52+/-1.0	1.0+/-0.06	36+/-1.0
ARW-10L	14.0W(10W)	800V	46.2+/-1.5	48.2 Max.	10.5+/-1.0	1.0+/-0.06	33+/-1.0

Note: Ratings are shown at max. ambient tem. of 275C, (Rating W) shall be used at 350C max. temperature.

Ordering Information

P/N	Type	Inductive/Non-inductive	TC	Resistance	Tolerance	Additional
ARW1N-10R0F000	ARW1	N	-	10R0	+/-1%(F)	000
ARW3-50RF000	ARW3		-	50ohm	+/-1%(F)	000
ARW5N-1.2KF000	ARW5	N	-	1.2Kohm	+/-1%(F)	000
ARW10S-50K0F000	ARW5		-	50Kohm	+/-1%(F)	000

0.5W to 10W AXIAL LEAD WIRE WOUND RESISTORS

ARW

Specifications

Type	Rating Power	Tolerance	Working Voltage	Resistance Ranges	
				Inductive	Non-inductive
ARW0.5	1W(0.5W)	+/-0.05(A) +/-0.1(B) +/-1.0(F) +/-5.0(J)	20V	0.1-3K	0.1-1.5K
ARW1	2W(1.0W)		50V	0.1-8K	0.1-3K
ARW2	3W(2.0W)		100V	0.1-10K	0.1-4K
ARW3	5W(3.0W)		200V	0.1-18K	0.1-9K
ARW5	7W(5.0W)		400V	0.1-35K	0.1-17K
ARW7	10W(7.0W)		450V	0.1-50K	0.1-25K
ARW10S	14W(10.0W)		700V	0.1-70K	0.1-35K
ARW10L	14W(10.0W)		800V	0.1-100K	0.1-50K

Note: Resistance ranges are shown at tolerance of +/-1%, please call factory for +/-0.1% and +/-0.05%.

Performance

	Specifications	Conditions
Temperature Coefficient	20 to 90 ppm/C	See note(1)
Load Life	+/-(0.5%+0.05ohm)	
Humidity	+/-(0.2%+0.05ohm)	
Thermal Shock	+/-(0.2%+0.05ohm)	
Short Time Overload	+/-(0.2%+0.05ohm)	
Dielectric	+/-(0.1%+0.05ohm)	500VAC min.
Insulation Resistance	1000Megohm min.	Dry condition.
Low Temperature Storage	+/-(0.2%+0.05ohm)	
High Temperature Storage	+/-(0.5%+0.05ohm)	
Mechanical Shock	+/-(0.1%+0.05ohm)	
Vibration	+/-(0.1%+0.05ohm)	
Thermal Strength	+/-(0.1%+0.05ohm)	

Note:

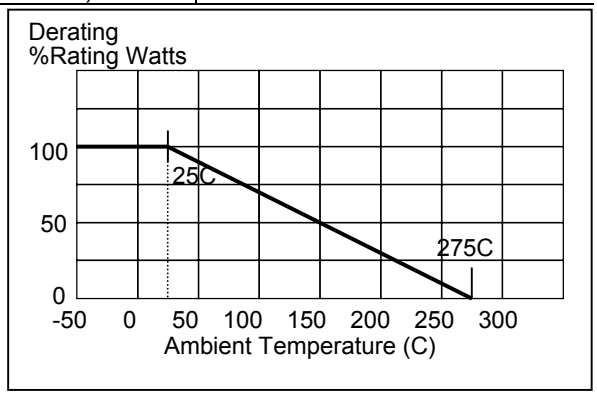
(1) Below 1ohm: +/-90ppm/C, 1ohm to 9.9ohm: +/-50ppm/C and 10ohms and above: +/-20ppm/C.

(2) Rated Power.

Rated power shall be applied under conditions in which the ambient temperature is in 25C. (Refer to right figure)

(3) Rated Voltage

Rated voltage shall be obtained from the following equation $E^2 = P*R$, where, E is rating voltage, P is rating power and R is nominal resistance.



Materials

Core: Alumina ceramic.
Resistance wire: CuNi or NiCr alloy.
Terminal caps: Metal cap
Leads: Tin plated copper, welded to cap.
Protection: Silicone resin.

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