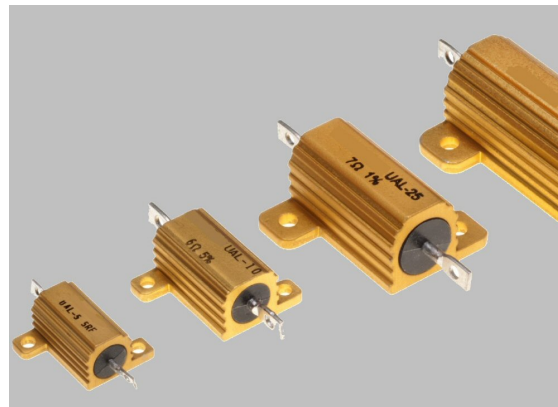


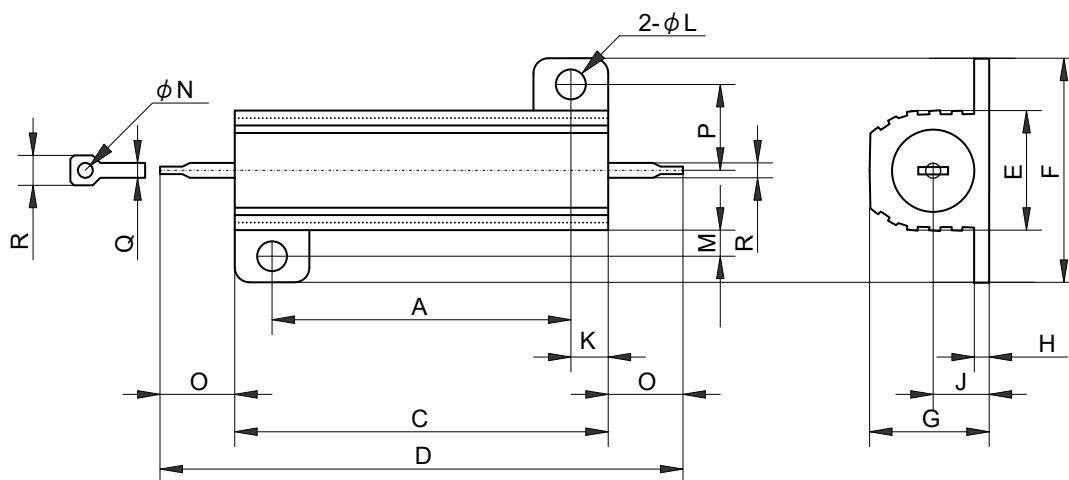
Aluminum Housed Wire Wound Resistors UAL-5, UAL-10, UAL-25, UAL-50



Features and Applications

- Power rating 5W to 50W, when requesting over 50W, please select WD75, WD100, WD150, WD200, WD250, WD300.
- High temperature operation, -55 deg C to 275 deg C
- Rush current protection.
- All welded construction.
- Low TCR 20ppm/K, Tolerance 1% in standard and available up to 0.01%.
- Non-inductive winding is available, called UALN.
- MIL-R-39009 and MIL-R-18546 style.

Dimensions (mm)



(mm)	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R
	±0.13	±0.13	±0.80	±1.60	±0.40	±0.40	±0.40	±0.25	±0.25	±0.25	±0.13±	±0.40	±0.15	±0.80	±0.80	±0.05	±0.80
UAL5	11.3	12.4	15.2	28.5	8.5	16.4	8.1	1.7	3.6	2.0	2.4	2.0	1.3	6.8	6.2	1.30	2.2
UAL-10	14.3	15.9	19.1	33.5	10.9	20.3	10.2	1.9	4.8	2.4	2.4	2.6	2.0	7.9	7.9	2.00	4.0
UAL-25	18.3	19.8	27.0	47.5	13.5	27.4	14.2	2.2	6.6	4.4	3.2	3.2	2.0	11.1	9.9	2.49	4.7
UAL-50	39.7	21.4	50.0	70.0	15.6	29.0	15.6	2.2	7.6	5.0	3.2	3.2	2.0	11.1	10.7	2.49	4.7
UALN-5	11.3	12.4	15.2	28.5	8.5	16.4	8.1	1.7	3.6	2.0	2.4	2.0	1.3	6.8	6.2	1.30	2.2
UALN-10	14.3	15.9	19.1	33.5	10.9	20.3	10.2	1.9	4.8	2.4	2.4	2.6	2.0	7.9	7.9	2.00	4.0
UALN-25	18.3	19.8	27.0	47.5	13.5	27.4	14.2	2.2	6.6	4.4	3.2	3.2	2.0	11.1	9.9	2.49	4.7
UALN-50	39.7	21.4	50.0	70.0	15.6	29.0	15.6	2.2	7.6	5.0	3.2	3.2	2.0	11.1	10.7	2.49	4.7

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Power Rating and Resistance

Model	Style	Power Rating(W @ 25°C)			Resistance Range (ohm)	
		MIL-R-39009 MIL-R-18548	Commercial	MIL		Free Air
UAL-5	PER-60 / RE-60		7.5 (1)	5 (1)	4.5	0.01 – 22K
UAL-10	PER-65 / RE-65		12.5 (1)	10 (1)	7.5	0.005 – 10K
UAL-25	PER-70 / RE-70		25 (2)	20 (2)	12	0.005 – 36K
UAL-50	PER-75 / RE-75		50 (3)	30 (3)	20	0.01 – 86K

Note:

For non-inductive windings, divide maximum resistance by 2.

- (1) Heat-sink required 1.0mm Aluminum plate of 832 cm² or equivalent.
- (2) Heat-sink required 1.0mm Aluminum plate of 1077 cm² or equivalent.
- (3) Heat-sink required 1.5mm Aluminum plate of 1877 cm² or equivalent.

Ordering Information

Model	Resistance	Tolerance	Note
UAL-25	50ohm	1%, F	1%, standard
UAL-5	any value in above range	0.05%, A	Inductive winding
UAL-10		0.10%, B	Inductive winding
UAL-25		0.25%, C	Inductive winding
UAL-50		0.50%, D	Inductive winding
UALN-5		1.00%, F	Non inductive winding
UALN-10			Non inductive winding
UALN-25			Non inductive winding
UALN-50			Non inductive winding

For non-inductive windings, please attach 'N' after 'UAL' as 'UALN'

Specifications

Specifications	Specifications
Tolerance	0.05%, 0.10%, 0.25%, 0.5%, 1%
TCR over 10ohm	+/-20ppm/K
TCR 1ohm to 10ohm	+/-50ppm/K
TCR less than 1ohm	Call factory
Temperature Range	-55 deg C to 275 deg C
Dielectric Strength	1500VAC
Environmental Performance, MIL-STD202	ΔIR
Dielectric	+/-0.2%
Load Life	+/-1.0%
Storage	+/-0.2%
Moisture Resistance	+/-0.2%
Thermal Shock	+/-0.2%
5X – 5 seconds Overload	+/-0.2%
Mechanical Shock	+/-0.1%
Vibration	+/-0.1%

Note: Country origin of UAL series is U. S. A.

Minimum order quantity is 100pcs in UAL-5, UAL10, UAL-25 and UAL-50.

Derating

