

Aluminum Chassis Precision



Power Resistors

Materials :

- Core: Ceramic steatite or alumina.
- Housing: Aluminum with hard anodic coating.
- Encapsulant: S: Silicone, C: Cement; End caps: Stainless steel.
- Element: Copper-nickel alloy, nickel-chrome alloy or manganese copper.
- Terminals: 5~150W Tinned terminals, 200~500W Threaded terminals.

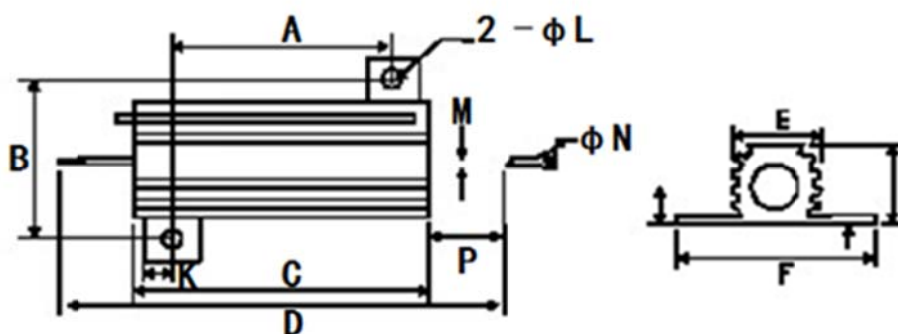


General Specification :

- Operating Temperature Range: -55°C ~ +275°C.

Power (W)	Resistance Range (Ω)		Tolerance (%)		Working (V) Max.
	ACR:Inductive	ACRN:Non-inductive	ACR	ACRN	
5W	0.01R~3K	0.01R~750R	B (±0.1%)	F (±1%)	$\sqrt{P * R}$
10W	0.01R~5K	0.01R~1K25	C (±0.25%)	G (±2%)	
25W	0.01R~10K	0.01R~2K	D (±0.5%)	J (±5%)	
50W	0.01R~10K	0.01R~2K	F (±1%)	K (±10%)	
75W	0.01R~20K	0.5R~5K	G (±2%)		
100W	1R~30K	1R~7K	J (±5%)		
150W	1R~40K	1R~10K	K (±10%)		
200W	1R~50K	1R~12K			
250W	1R~50K	1R~12K			
300W	1R~50K	1R~12K			
500W	1R~50K	1R~12K			

Aluminum Chassis Precision Power Resistors Dimension: 5~50W

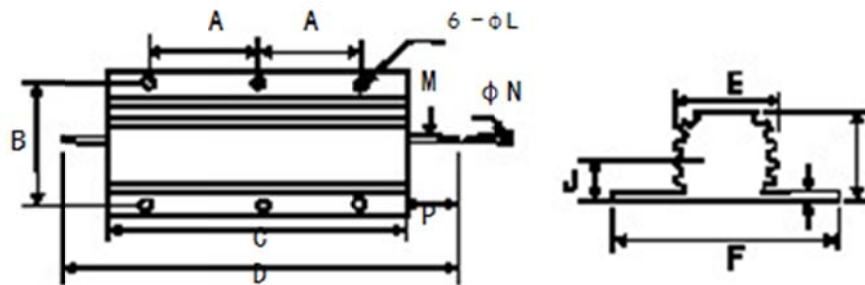


Power (W)	A	B	C	D	E	F	G	H	J	K	Φ L	Φ M	Φ N	P	Weight
	±1.0	±1.0	±1.0	±2.0	±1.0	±1.0	±1.0	±0.8	±1.0	±2.0	±0.8	±0.8	±0.8	±2.0	±1.5
5W	11.4	12.5	15.5	28.6	9.5	16.0	8.0	1.7	3.8	2.0	2.2	1.2	1.3	7.0	6g
10W	14.0	16.0	19.5	35.0	11.0	21.0	10.0	1.9	4.2	2.4	2.2	2.0	2.2	8.0	11g
20W	18.3	20.0	27.0	49.0	16.0	27.0	15.5	2.2	6.1	5.0	3.3	2.0	2.2	11.0	18g
25W	18.3	20.0	27.0	49.0	16.0	29.0	15.5	2.2	6.6	5.0	3.3	2.0	2.2	11.0	20g
50W	40.0	22.0	50.0	72.0	16.0	29.0	15.5	2.2	6.6	5.0	3.3	2.0	2.2	11.0	30g

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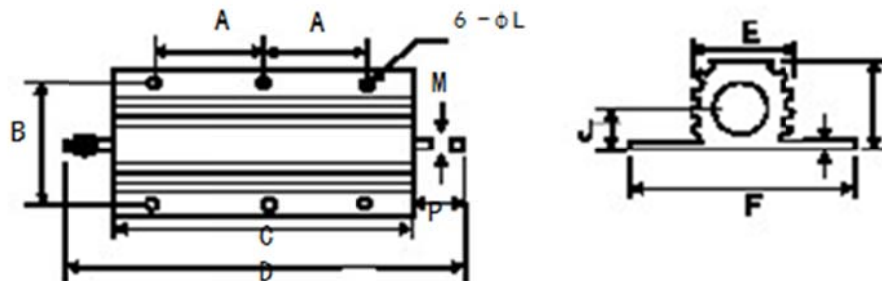


Aluminum Chassis Precision Power Resistors Dimension: 75~200W



Power (W)	A	B	C	D	E	F	G	H	J	K	φ L	φ M	φ N	P	Weight
	±1.0	±1.0	±1.0	±2.0	±1.0	±1.0	±1.0	±0.8	±1.0	±2.0	±0.8	±0.8	±0.8	±2.0	±5.0
75W	23.5	38.0	66.0	100.0	27.0	48.0	26.0	3.3	11.5	-	4.3	2.8	2.2	20.0	90g
100W	36.5	38.0	98.0	130.0	27.0	48.0	26.0	3.3	11.5	-	4.3	2.8	2.2	20.0	160g
150W	52.0	38.0	135.0	170.0	27.0	48.0	26.0	3.3	11.5	-	4.3	2.8	2.2	20.0	240g
200W	70.0	38.0	155.0	190.0	27.0	48.0	26.0	3.3	11.5	-	4.3	2.8	2.2	20.0	420g

Aluminum Chassis Precision Power Resistors Dimension: 250~500W



Power (W)	A	B	C	D	E	F	G	H	J	K	φ L	φ M	φ N	P	Weight
	±1.0	±1.0	±1.0	±2.0	±1.0	±1.0	±1.0	±0.8	±1.0	±2.0	±0.8	±0.8	±0.8	±2.0	±5.0
250W	45.5	58.0	112.0	147.0	46.5	73.0	43.0	5.5	21.0	-	5.8	6.0	-	20.0	480g
300W	51.5	58.0	128.0	160.0	46.5	73.0	43.0	5.5	21.0	-	5.8	6.0	-	20.0	580g
500W	87.0	58.0	200.0	230.0	46.5	73.0	43.0	5.5	21.0	-	5.8	6.0	-	20.0	970g

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Electrical and mechanical properties:

TEST ITEMS	SPECIFICATIONS	TEST METHODS
Resistance Temp. Coeff.	$\pm 25, 50, 100, 250\text{ppm}/^{\circ}\text{C}$	Room temperature /100°C up.
Short Time Over load	$\Delta R \leq \pm (2\%R + 0.05\Omega)$	5 x wattage rating-5sec.
Vibration Proof	$\Delta R \leq \pm (0.2\%R + 0.05\Omega)$	1.5m/m ;10~50~10Hz/min X-Y-Z 2 hours each.
Load Life	$\Delta R \pm (5\% + 0.05\Omega)\text{Max.}$	Load Rating (chassis mounted) (1.5 Hour on 0.5 Hour OFF) Repeat 1000 Hours
Terminal Strength	$\Delta R \pm (0.2\% + 0.05\Omega)\text{Max.}$	Pull Test (30 sec Min): 5~10W: 22.2N , 25W~500W: 44.4N Torque Test (5~15sec) : 100W-150W:2.7N.m, 250W-500W: 3.6N.m
Dielectric withstanding voltage	$\Delta R \leq \pm (0.5\%R + 0.05\Omega) \text{Max.}$	5~25W 1000VAC;50W 1500VAC; 75~500W 2500VAC; at 1 minute
Insulation Resistance	1000 MΩ Min.	Under the same test condition of Dielectric Strength, Load DC500V and measure the Insulation R.
Moisture Resistance	$\Delta R \pm (5\% + 0.05\Omega)\text{Max.}$	Temp 40°C moisture 95% DC 100V 100 Hrs.
Moisture Load Life	$\Delta R \pm (5\% + 0.05\Omega)\text{Max.}$	Temp 40°C moisture 90% 1/10 X wattage rating (1.5 Hrs on-0.5hrs off)-Repeat 200 Hrs.
Resistance to Soldering Heat	$\Delta R \pm (1\% + 0.05\Omega)\text{Max.}$	350°C \pm 10°C for 3 \pm 0.5 Seconds

Order Information:

L	-	KLS6	-	ACRx	-	10W	-	100R	-	J
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RoHS	ACR:	Power (W)	Resistance (Ω)		Tolerance (%)	
	Inductive	5W	1R0	1Ω	J	±5%
	ACRN:	10W	10R	10Ω	K	±10%
	Non-inductive	20W	100R	100Ω		
		50W	1K	1000Ω		