RX24 Aluminum-Housed Power Resistor

Injection-molded · 5W-1000W · Gold aluminum housing · High insulation · Compact, high power

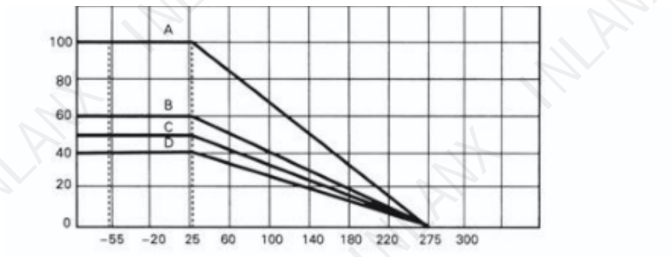


RX24 gold aluminum-housed power resistor

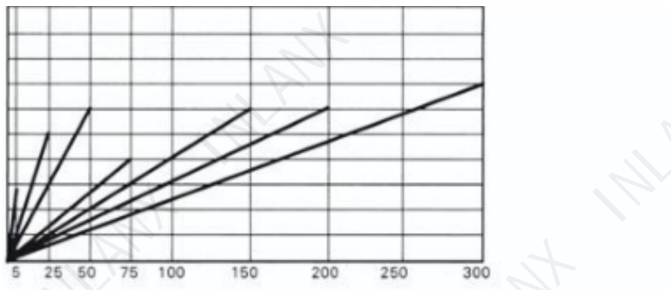
Features

- Aluminum housing dissipates heat; suitable for heatsink mounting.
- Compact size with high power capacity.
- Molded construction provides good insulation.
- Applicable standards: GB/T5729-94, GB/T5732-85.

Derating and Surface Temperature Rise



Ambient temperature



Percentage of rated power (%)

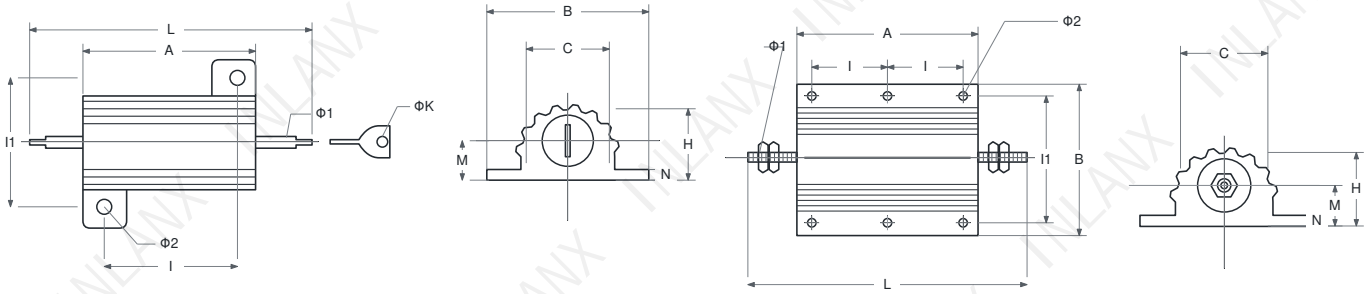
Left: Derating (A: with heatsink; B: 10 W without heatsink; C: 25 W without heatsink; D: 50-300 W without heatsink). Right: Surface temperature rise.

Technical Specifications

* TCR unit exponent is unreadable in the source.

Model	With heatsink Power (W)	Without heatsink Power (W)	Resistance range (Ω)	Temperature coeff. Unit unclear*	Tolerance (%)	Withstand voltage (V)
RX24/RXG24	5	3	0.01~1K	±50 ±100 ±250	±1(F) ±2(G) ±5(J)	2000
	10	8	0.01~1.5K			
	25	12.5	0.01~10K			
	30	15	0.01~27K			
	50	20	0.01~33K			
	75	45	0.01~39K			
	100	50	0.01~51K			
	150	55	0.01~56K			
	100	50	0.01~62K			
	200	100	0.01~56K			
	250	120	0.01~75K			2500
	300	150	0.01~75K			
	500	200	0.01~82K			
	1000	400	0.01~82K			

Dimensions (mm)



RX24 aluminum housing: side, end and top views

Model	Power (W)	Amax	B	Lmax	Hmax	C	I	I1	M	N	Φ1	Φ2	Area (cm²)	Thickness (mm)	Weight (g)
	5	15.5	16	36.5	8	8.5	11.4	12	4.4	1.5	1.2	2.2	415	3	
	10	19.5	21	40.5	10	11.2	14.3	16	5	2	2	2.5	415		6
RX24	20	27	27	48.0	13	14.3	18.3	20	7	2	2	3.5	535	1	11
	30	34.0	29	55.0	15.5	16.3	25	22	7.3	2	2	3.5	535		18
	50	50	50	71	15.5	16.3	40	22	7.3	2	2	3.5	995		30
	75	65.5	48	93.5	26	27	23.5	37	11.5	3.5	M4	4.4	995		90
	100	98	48	126	26	27	35	37	11.5	3.5	M4	4.4	995		160
	150	135	48	158	26	27	52	37	11.5	3.5	M4	4.4	995		240
	200	92	73	132	45	46.5	35	58	21	5	M6	5.5	3750	3	420
RXG24	250	112	73	152	45	46.5	45	58	21	5	M6	5.5	4765		480
	300	130	73	170	45	46.5	51	58	21	5	M6	5.5	5780		580
	500	204	73	244	45	46.5	87	58	21	5	M6	5.5	8500		970
	1000	300	73	340	45	46.5	87	58	21	5	M6	5.5	12500		970

Performance Test Requirements

Test	Performance requirement	Test method
Solderability	Solder flows freely and wets the leads.	235±5°C, 2 s, solder bath
Terminal strength	ΔR ≤ ±(1%R + 0.05 Ω)	40 N
Overload	ΔR ≤ ±(1%R + 0.05 Ω)	5 × rated power (PR), 5 s
Temperature cycling	ΔR ≤ ±(1%R + 0.05 Ω)	-55°C to +155°C, 5 cycles
Soldering heat	ΔR ≤ ±(1%R + 0.05 Ω)	350±10°C, 3.5±0.5 s
Shock	ΔR ≤ ±(1%R + 0.05 Ω)	490 m/s², 11 ms, 18 shocks
Vibration	ΔR ≤ ±(1%R + 0.05 Ω)	10-500 Hz, 98 m/s², 6 h
Surface temp. rise	≤275°C	Rated power (PR)
Steady damp heat	ΔR ≤ ±(5%R + 0.05 Ω)	40±2°C, RH 93±3%, 21 days
Long-term life	ΔR ≤ ±(5%R + 0.05 Ω)	Rated power at room temperature, 1,000 h