POWER
■MAX. 50W
■TOL. 0.5%
■TC. 30ppm/°C

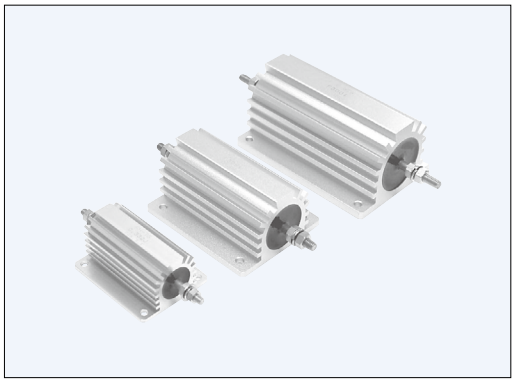
05.2023

PCN RESISTORS

RoHS Compliance

POWER TYPE METAL CLAD WIRE-WOUND RESISTORS — RH / RHF

Compact but high-power metal clad wire-wound resistor sealed with heat-resistant cement



Features:

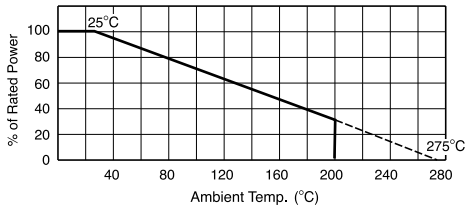
- Excellent short time overload characteristics
- Low TCR
- Non-inductive type as well as Inductive type available

FIG.1

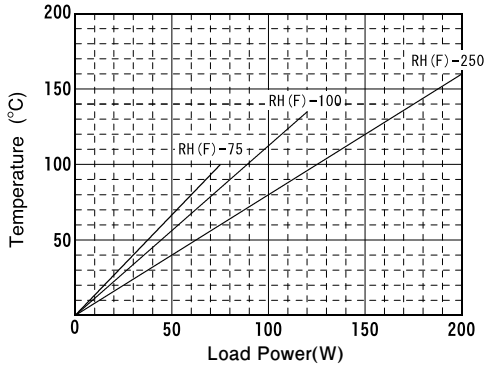
Type	Wattage Rating (W)		Resistance Range (Ω)		Resistance Tolerance (%)	MAX Working (V)		Dielectric Strength. (V)	Operating Temp. (°C)	MAX Weight (g)
	Chassis Mounted	Free Air	Inductive(RH)	Non-Inductive (RHF)		RH	RHF			
RH—75	75	30	0.2 ～ 20K	0.07 ～ 10K	±0.5(D) R≧10Ω ±1 (F) R≧0.1Ω ±2 (G) ±3 (H) ±5 (J) ±10 (K)	1500	1050	AC4500	−55～+200	200
RH—100	120	50	0.4 ～ 50K	0.12 ～ 25K		1900	1340			450
RH—250	200	75	0.6 ～ 80K	0.1 ～ 40K		2500	1750			800

The smaller one among the two values below needs to be dealt as maximum working voltage.
Rated voltage = √ (Rated power x Nominal resistance value) or the maximum working voltage specified in the table.

Ambient Temp. Derating Curve



Surface Temp. Versus Load Power. (on chassis)

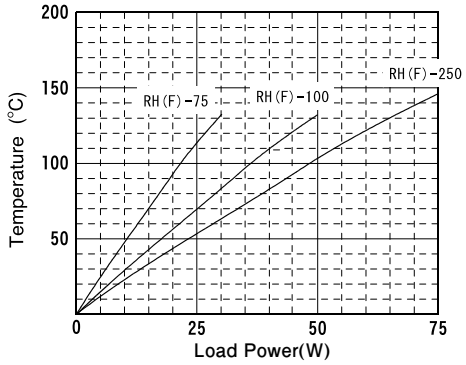


Temp. Coefficient

(Standard Temp. +25°C Test Temp. −55°C, +125°C, +200°C)

Type	Temp. Coefficient (ppm/ °C)		
	±30	±50	±100
RH—75	2KΩ≦R	0.3Ω≦R< 2KΩ	0.2Ω≦R<0.3Ω
RH—100	4KΩ≦R	0.5Ω≦R< 4KΩ	0.4Ω≦R<0.5Ω
RH—250	6KΩ≦R	0.8Ω≦R< 6KΩ	0.6Ω≦R<0.8Ω
RHF75	1KΩ≦R	0.5Ω≦R< 1KΩ	0.07Ω≦R<0.5Ω
RHF100	2KΩ≦R	0.7Ω≦R< 2KΩ	0.12Ω≦R<0.7Ω
RHF250	3KΩ≦R	1Ω≦R< 3KΩ	0.1Ω≦R< 1Ω

Surface Temp. Versus Load Power. (Free air)



PCN Corporation

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POWER
■MAX. 200W
■TOL. 0.5%
■TC. 30ppm/°C

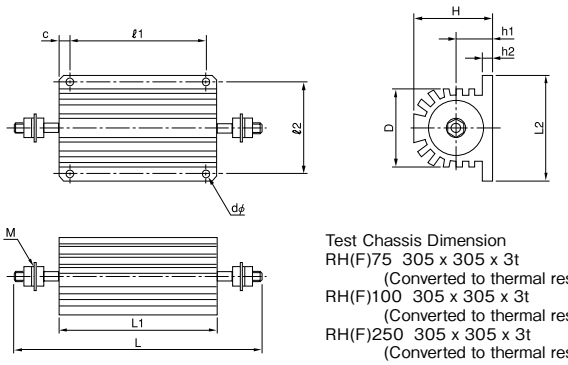
05.2023

PCN RESISTORS

RoHS Compliance

POWER TYPE METAL CLAD WIRE-WOUND RESISTORS — RH / RHF

RH(F)75～RH(F)250



Type	Dimensions (mm)											
	L	L1±1	L2±0.8	ℓ1±0.8	ℓ2±0.8	D±1	H±0.8	d±0.3	c±0.8	h1±1	h2±0.5	M
RH-75	110	66	52	56	42	32	33	4.8	5	16	3.2	5
RH-100	140	88.9	71.4	69.9	57.2	46	44.5	4.8	9.5	19.5	4.8	6
RH-250	177.8	114.3	76.2	98.4	63.5	54	55.6	4.8	7.9	25.4	6.4	6

Test Chassis Dimension
RH(F)75 305 x 305 x 3t
(Converted to thermal resistance:1 ℃/W)
RH(F)100 305 x 305 x 3t
(Converted to thermal resistance:1 ℃/W)
RH(F)250 305 x 305 x 3t
(Converted to thermal resistance:1 ℃/W)

Performance:(Following figures are not applied to the resistors less than 0.1Ω)

Parameters	Test Condition	Specification
Terminal Strength	Torque Test (5～15 sec) RH-75 2.7N·m, RH-100 RH-250 3.6N·m	±(0.2%+0.05Ω)
Heat Resistance	275°C 2Hr	±(0.5%+0.05Ω)
Dielectric Strength	FIG.1 1min.	±(0.2%+0.05Ω)
Insulation Resistance	Under the same test condition of Dielectric Strength, load DC500V and measure the Insulation R.	1000MΩ MIN
Short Time Over Load	5×Wattage Rating 5 sec	±(0.5%+0.05Ω)
Moisture Resistance	Temp. 40°C Moisture 95% 1/10×Wattage Rating (1.5Hr ON 0.5Hr OFF) Repeat 500Hr	±(0.5%+0.05Ω)
Load Life	Load Rating (chassis mounted) 1.5Hr ON 0.5Hr OFF Repeat 1000Hr	RH(F)5～RH(F)55 ±(1%+0.05Ω) RH(F)60～RH(F)250 ±(3%+0.05Ω)
Vibration	10Hz - 55Hz - 10Hz(1 min) Horizontal and vertical direction for 2 Hr each	±(0.2%+0.05Ω)

About Pulsed Load Power

Please refer to "How to select a wire-wound resistor at a short time overload"(Document #PDB101-2-1f).
It is available by sending us a request form on our website.

How to order

RH-250 (Type) 100Ω (Resistance) F (Tolerance)

- Type: "RHF" for non-inductive wire winding
- Standard Resistance E-24 Series J (±5%)
- Order for a single piece accepted for any resistance value within the standard resistance range

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