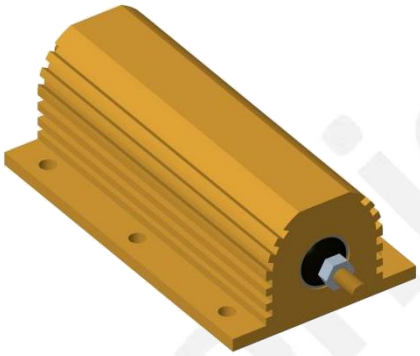
HoRX Aluminium Housed Resistor Series SelectionSpecification

■ Features



① Superior reliability

② High insulation, small size, high power loads

③ Use of environmental temperature: -55 ℃ ~ +275 ℃

④Adoption of specialised autonomous and controllable processes

⑤ Good heat dissipation by applying heat absorption effect when mounted on the substrate.

■ Applications

① converter ② charging post ③ Industrial Power Supplies ④ li-ion battery

⑤communications equipment ⑥ Electricity distribution ⑦ Servo Drive Systems

■ Electrical parameters

model number	Rated power at 25°C (W)		Resistance Range(Ω)	temperature coefficient TCR(10/℃)	resistance error(%)	withstand voltage (V)
	With heat sink	Without heat sink				
RX	5	3	0.01~1K	±20 ±50 ±100 ±250 ±350	±1 ±5	1000
	10	8	0.01~1.5K			
	25	12.5	0.01~10K			
	30	15	0.01~27K			2000
	40	18	0.01~30K			
	50	20	0.01~33K			
	60	30	0.01~35K			
	75	45	0.01~39K			
	100	50	0.01~51K			2500
	150	55	0.01~56K			
	200	100	0.01~58K			
	250	120	0.01~75K			
	300	150	0.01~75K			
	350	180	0.01~78K			
	500	200	0.01~82K			

High-tech enterprises IATF16949 ISO9001 RoHS REACH

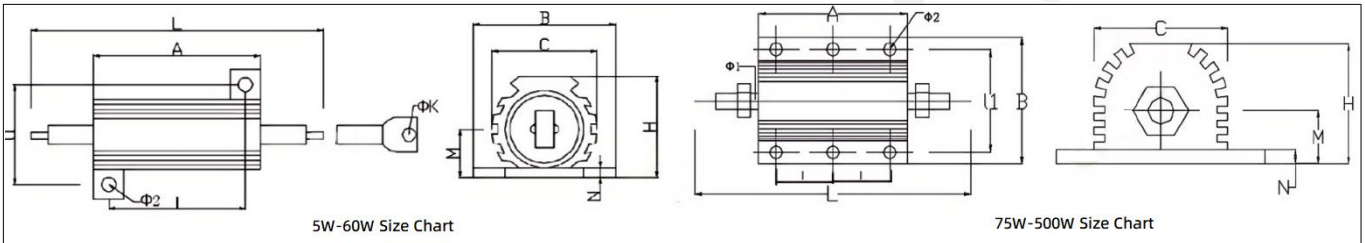
■ Product Selection

Selection Example：HoRX-100W-20R-5%	Aluminium Case Resistors：HoRX

Ho RX 100W 20R 5%

makers	product category	Rated power	Resistance	precision
Milliohm electrons	RX	5W~500W	10mR=0.01R 100mR=0.1R 1R=1R 82KR=82KR	±1% ±5%

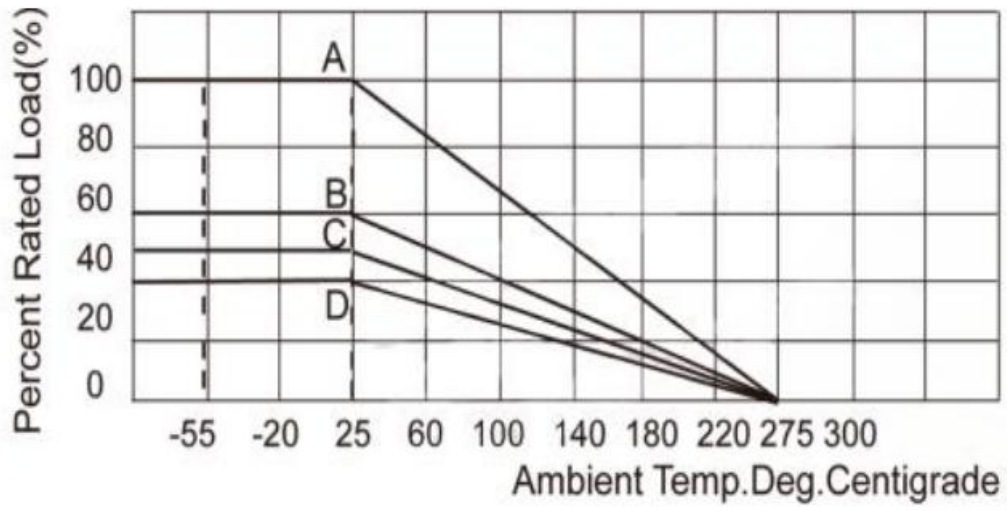
■ Product Size（mm）



model number	Rated power at 25℃ (W) (with heat sink)	dimensions(mm)											Standard heat sink (aluminum)		weights (g)
		A±1.5	B±1.5	H±1.5	C±1.5	I±0.5	I1±0.5	M±0.5	N±0.5	Φ2±0.5	Φk/ϕ1 ±0.5	L	surface area (cm2)	thicknesses (mm)	
RX	5	15	16.9	8	9.5	11.5	12.5	3.8	1.5	2.0	Leaded	59~75	415	1	3
	10	20	23.7	10.5	10	13.5	16.5	5	1.9	3	2.0	40~45	415		6
	20/25	28	27	14	13	18	19.3	6	2	3.5	2.0	48~53	535		11
	30	27	28	15.5	15	17.9	20.2	7	2.2	3.5	2.0	50.5~57	535		18
	40	34	28	15.5	15	25	21.9	7	2.2	3.5	2.0	55.5~67	715		20
	50	50	28	15.5	14.8	39.4	21.9	7	2.2	3.5	2.0	71~76	995		30
	60	60	28.8	15.5	15	39	15.5	7	2.2	3.5	2.0	83~95	995	3	70
	75	66	48	26	26.8	23.5	37	11.5	3.5	4.5	M4	95~102	995		90
	100	98	48	26	26.8	35	37	11.5	3.5	5	M4	125~135	995		160
	150	136	48	26	26.8	56	37	11.5	3.5	5	M4	165~175	995		240
	200	92	73	45	46.2	35	58	21	5.1	6	M6	120~130	3750		420
	250	112	73	45	46.2	45	58	21	5.1	6	M6	142~150	4765		480
	300	128	73	45	46.2	52	58	21	5.1	6	M6	155~165	5780		580
	350	128	73	45	46.2	52	45	21	5.1	6	M6	165~175	5780		580
	500	204	73	45	46.2	86	58	21	5.1	6	M6	222~232	8500		970

■ power curve

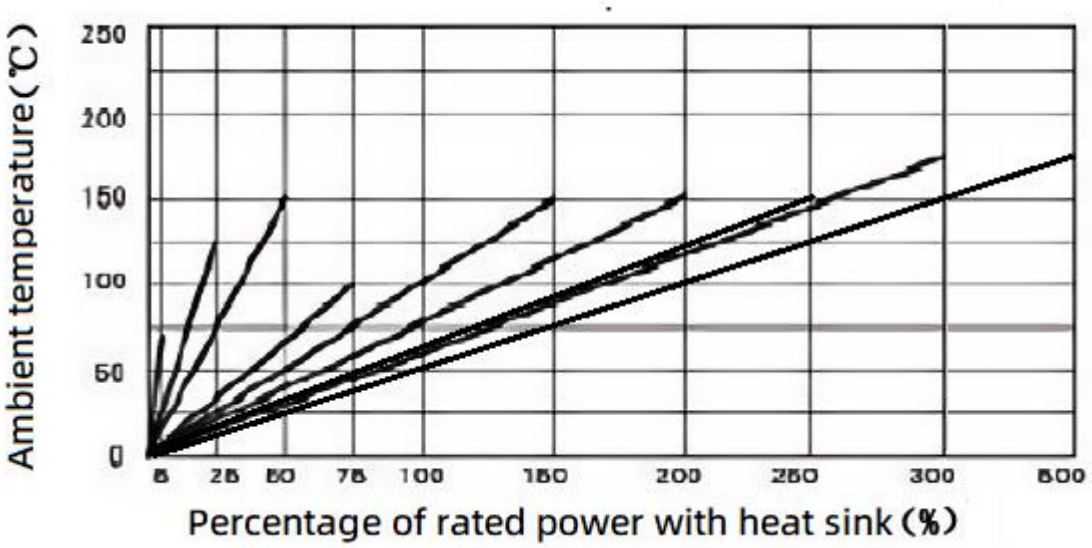
The required power down curve for the resistor at ambient temperatures greater than 25 is shown below



A For all RX Resistor with heat sink B 10W without cooling plate
C 25W without cooling plate D 50W~300W without cooling plate

■ Surface Temperature Chart

Surface Temperature Chart



■ Durability tested

Pilot project	Test Method (SJ1330-78)	Performance requirements
Solderability	The solder flows freely and the leads are wet	235±5℃, 2S slot welding method
Strength at the lead-out end	Tensile force 40N	△R≤±(1%R+0.05Ω)
overload	5 times the rated power, 5s	△R≤±(1%R+0.05Ω)
Temperature changes	-55℃~+155℃, 5 cycles	△R≤±(1%R+0.05Ω)
Resistant to welding heat	350±10℃ ,3.5±0.5S	△R≤±(1%R+0.05Ω)
impact	Acceleration 490m/s², 11ms.18 times	△R≤±(1%R+0.05Ω)
shake	Frequency 10-50Hz, acceleration 98m/s², 6H	△R≤±(1%R+0.05Ω)
Surface temperature rise	VR	≤ 275℃
Constant damp heat	Temperature 40±2℃ Humidity 93±3%.21 days	△R≤±(5%R+0.05Ω)
Long life	The rated power load is applied at room temperature 1000H	△R≤±(5%R+0.05Ω)

■ Product Usage Suggestions

- ◆ During the use of the product, pay attention to surface protection to prevent bumps, scratches, and other defects on the product surface.
- ◆ When installing and using the product, avoid the product being affected by mechanical stress.
- ◆ The long-term power of the product should be less than or equal to the rated power to avoid resistance drift caused by long-term overload.
- ◆ When using the product under high temperature or poor heat dissipation conditions, refer to the power consumption reduction curve for derating.

■ Storage instructions

- ◆ The product storage environment temperature is 5~35℃, humidity is ＜65% RH, and the humidity should be kept as low as possible.
- ◆ The product should be stored in a clean, dry environment without harmful gases.
- ◆ Avoid removing the product from the taping package before use.
- ◆ Under the above storage conditions, the product can be kept for 1 year.
- ◆ For products over 1 year old, check whether the surface is oxidized and perform soldering test.

■ Revision of curriculum vitae:

version number	revision date	Content of the modification	Reason for change	change agent	auditor
Ho-B4	2025-03-04	Update the content layout of the specification	Product optimization	YongKang Huang	YiWenLeng

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