



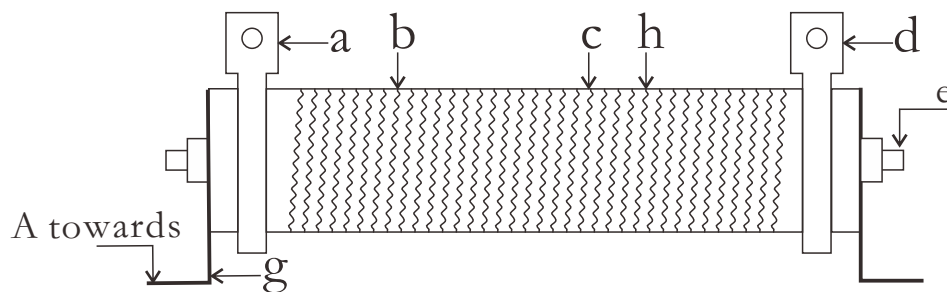
● Features

- I The resistors surface is coated in green.
- II Good overload and heat durability capacity , the useful time is longer than the others, withstand high voltage.
- III Resistance tolerance: $\pm 5\%$ 、 $\pm 10\%$.

● Application

- I Mostly used in large power supply
- II Electricity equipment
- III Electrical equipment
- IV Locomotive

● Construction



ad	b	c	e	g	h
Terminal block	Epoxy resin insulating layer	Alloy wire	Metal screw	Zinc plating support	Alumina porcelain

● Ordering Information

Example:

HPR (1)	50B (2)	J (3)	10R00 (4)	0 (5)	D002: (6)
Series Name	Power Rating	Resistance Tolerance	Resistance	Special code	Drawing No

(1)Type: HPR SERIES

(2)Power Rating: 25B=25W, 50B=50W, 100=100W, 500=500W, A00=1000W, A50=1500W, B00=2000W

(3)Tolerance: J= $\pm 5\%$, K= $\pm 10\%$

(4)Resistance Value: 0R100=0.1 Ω , 0R200=0.20 Ω , 10R00=10 Ω , 10K00=10K Ω

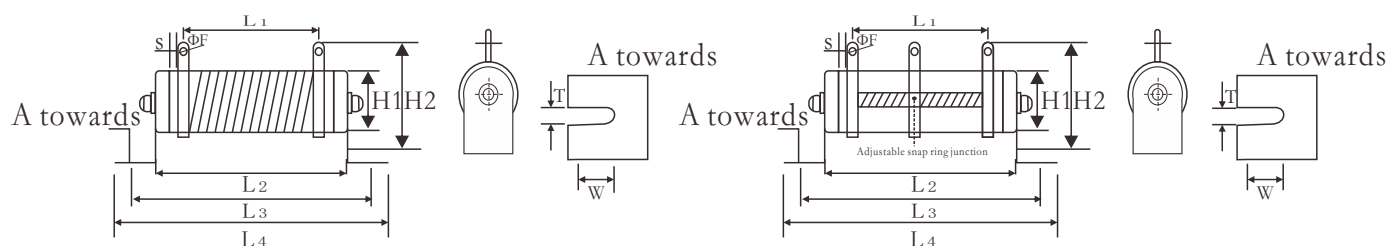
(5)O: Special code

(6)D002:Drawing No

● Reference Standards

JISC 5201-1

● Dimensions



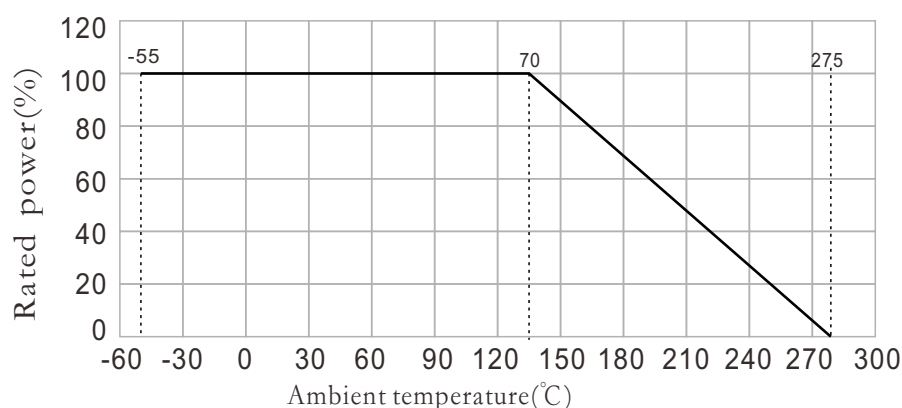
Type	Power (W)	Dimensions (mm)									
		L1 ± 2	L2 ± 3	L3 ± 3	L4 ± 4	H1 ± 1	H2 ± 1	S ± 0.5	F ± 0.5	W ± 1	T ± 0.5
HPR25B	25	40	60	75	100	20	50	5.0	3.5	13.0	5.0
HPR50B	50	82	100	114	140	30	58	6.0	5.0	14.0	6.0
HPR100	100	132	150	174	200	30	58	6.0	5.0	14.0	6.0
HPR150	150	162	180	194	220	30	58	6.0	5.0	14.0	6.0
HPR200	200	207	225	240	265	30	58	6.0	5.0	14.0	6.0
HPR250	250	292	310	324	350	30	58	6.0	5.06.0	14.0	6.0
HPR300	300	258	270	285	328	41	85	7.8	6.0	23.0	6.0
HPR400	400	322	344	360	406	41	85	7.8	6.0	23.0	6.0
HPR500	500	322	344	355	406	51	95	7.8	6.0	26.0	8.5
HPRA00	1000	290	315	325	375	71	110	10.0	8.0	32.0	8.5
HPRA50	1500	405	420	435	505	71	110	10.0	8.0	32.0	8.5
HPRB00	2000	495	525	540	610	71	110	10.0	8.0	32.0	8.5

Note: We can according customer requirements to customize the specification and dimension, also can product multiple resistance value of one ceramic tube or cancel the fixed plank.

● Applications And Ratings

Type	Power (W)	Resistance Range (Ω)	Tolerance	T.C.R PPM/°C	Operating ambient temperature
HPR25B	25	0R22~4K7	± 5% ± 10%	± 350 PPM/°C	-55°C ~ +275°C
HPR50B	50	0R22~10K			
HPR100	100	0R22~15K			
HPR150	150	0R33~18K			
HPR200	200	0R33~22K			
HPR250	250	0R36~24K			
HPR300	300	0R33~27K			
HPR400	400	0R33~30K			
HPR500	500	0R33~33K			
HPRA00	1000	0R33~36K			
HPRA50	1500	0R33~39K			
HPRB00	2000	0R33~43K			

Derating Curve



Performance

Test Items	Performance	Test Methods(JIS C 5201-1)
Temperature coefficient	$\pm 350\text{ppm}/^{\circ}\text{C}$	Test resistance value at normal temperature and normal temperature added 100°C , calculate $^{\circ}\text{C}$ resistance value change rate.
Short-time overload	$\Delta R \leq \pm (2\%R_0 + 0.05\Omega)$	According 10 times rated power to account the power or max. overload voltage(get the lower) for 5seconds.
Resistance to soldering heat	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$	Immerge into the $350 \pm 10^{\circ}\text{C}$ tin stove for 2~3 seconds
Solderability	Tth soldering area is over 98%	Immerge into the $245 \pm 3^{\circ}\text{C}$ tin stove for 2~3 seconds
Temperature cycle	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$	At -55°C for 30min, then at $+25^{\circ}\text{C}$ for 10~15min, then at $+155^{\circ}\text{C}$ for 30min, then at $+25^{\circ}\text{C}$ for 10~5min, total 5cycles.
Load life in humidity	$\Delta R \leq \pm (5\%R_0 + 0.05\Omega)$	Overload rated voltage or Max.working voltage(get the lower)for 1000hours (1.5hours on and half-hour off) at the $40 \pm 2^{\circ}\text{C}$ and 90~95% relative humidity.
Load life in heat	$\Delta R \leq \pm (5\%R_0 + 0.05\Omega)$	Overload rated voltage or Max.working voltage(get the lower)for 1000hours (1.5hours on and half-hour off) at the $70 \pm 2^{\circ}\text{C}$.
Nonflammability	No visible flame	Respectively load AC voltage by 5,10,16 times rated power for 5 minutes.