

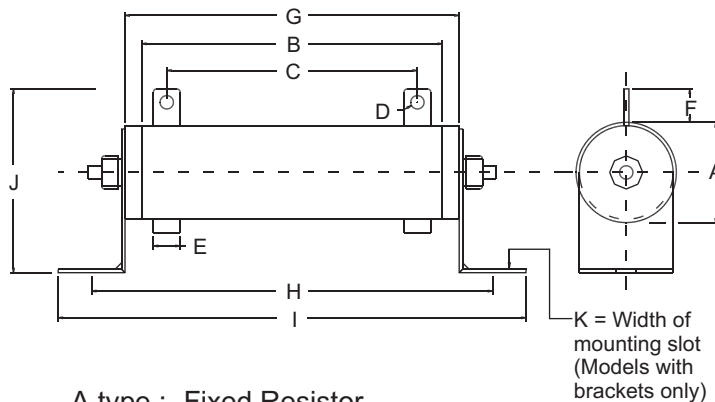
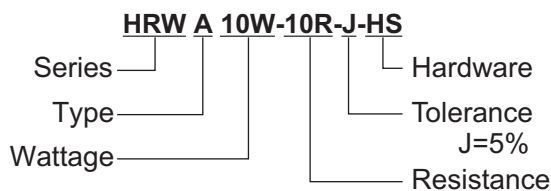
HIGH POWER WIRE WOUND RESISTOR

HRW Series: Non-Flammable, Wire Wound

FEATURES

- Non-Flammable
- Wire Wound

PART NUMBER EXAMPLE



- A type : Fixed Resistor
- B type : Fixed with a tap
- C type : Adjustable Resistor
- N type : Non-inductively wound

- Hardware: HS = Screw
 HP = Press in Bracket
 HX = Special
 Omit = No Hardware

SPECIFICATIONS

Watts Power Rating	Dimensions (m/m)											Ohms Resistance Range
	A±1	B±2	C±2	D±0.1	E±0.2	F±1	G±2	H±2	I±2	J±2	K±0.1	
10W	12.5	45	35	2.1	4	10	55	56	57	30	4	1 ~ 10K
12W	12.5	45	35	2.1	4	10	55	56	57	30	4	1 ~ 15K
20W	16.5	60	45	3	5	12	70	84	100	37	4	1 ~ 20K
30W	16.5	80	65	3	5	12	90	104	120	37	4	1 ~ 30K
40W	16.5	110	95	3	5	12	120	134	150	37	4	1 ~ 40K
50W	25	110	92	5.2	8	19	120	142	164	58	6	0.1 ~ 50K
60W	28	90	72	5.2	8	17	101	123	145	60	6	0.1 ~ 60K
80W	28	110	92	5.2	8	17	121	143	165	60	6	0.1 ~ 80K
100W	28	140	122	5.2	8	17	151	173	195	60	6	0.1 ~ 100K
120W	28	160	142	5.2	8	17	171	193	215	60	6	0.1 ~ 120K
150W	28	195	177	5.2	8	17	206	229	250	60	6	0.1 ~ 150K
160W	35	185	167	5.2	8	17	197	217	245	75	8	0.1 ~ 160K
200W	35	210	192	5.2	8	17	222	242	270	75	8	0.1 ~ 200K
250W	40	210	188	5.2	10	18	222	242	270	77	8	0.5 ~ 250K
300W	40	260	238	5.2	10	18	272	292	320	77	8	0.5 ~ 300K
400W	40	330	308	5.2	10	18	342	380	390	77	8	0.5 ~ 400K
500W	50	330	304	6.2	12	28	346	367	399	105	9	0.5 ~ 500K
600W	50	400	384	6.2	12	28	416	437	469	105	9	1 ~ 600K
800W	60	460	425	6.2	15	30	480	504	533	112	10	1 ~ 800K
1000W	60	540	505	6.2	15	30	560	584	613	112	10	1 ~ 1M
1300W	65	650	620	6.2	15	30	667	700	715	115	10	1 ~ 1.3M

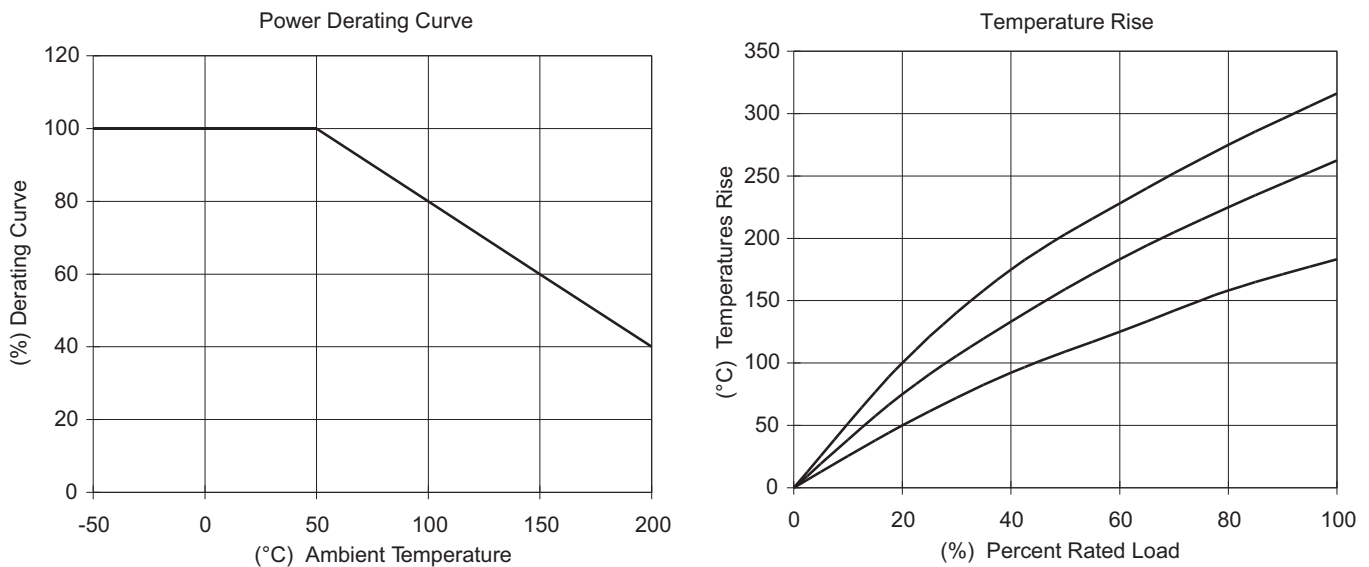
HIGH POWER WIRE WOUND RESISTOR

HRW Series: Non-Flammable

ELECTRICAL SPECIFICATION

Characteristics	Limits	Test methods
Resistance and tolerance	Resistance Nominal $1\Omega \leq R$ $1\Omega > R$ Resistance Tolerance $\pm 5\%(J)$ $\pm 10\%(K)$	JIS-C-5202 5-1
Temperature coefficient	$\pm 200\text{PPM}/^\circ\text{C}$ max	JIS-C-5202 5-2b
Power rating load	$\Delta R/R \leq \pm(2\% + 0.05\Omega)$ (Temperature) 350°C max.	JIS-C-5202 5-4
Short-time overload	1000% rated power 5 seconds $\Delta R/R \leq \pm(2\% + 0.05\Omega)$	JIS-C-5202 5-5
Insulation resistance	DC500V $100\text{M}\Omega$ min.	JIS-C-5202 5-6
Dielectric withstanding voltage	AC3000V 1 minute	JIS-C-5202 5-7

ELECTRICAL CURVES



SHORT-TIME OVERLOAD RATING

(Second) Load Time	1	2	3	4	5	10	30	60	180	300	600	900
(%) Power Increase	2600	2000	1600	1400	1300	1000	600	450	200	150	120	110

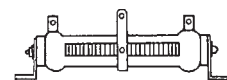
BODY TYPE CONFIGURATIONS (All Diagrams showing HS type hardware)



Type A (Fixed Resistor)



Type B (Fixed With Tap)



Type C (Adjustable Resistor)