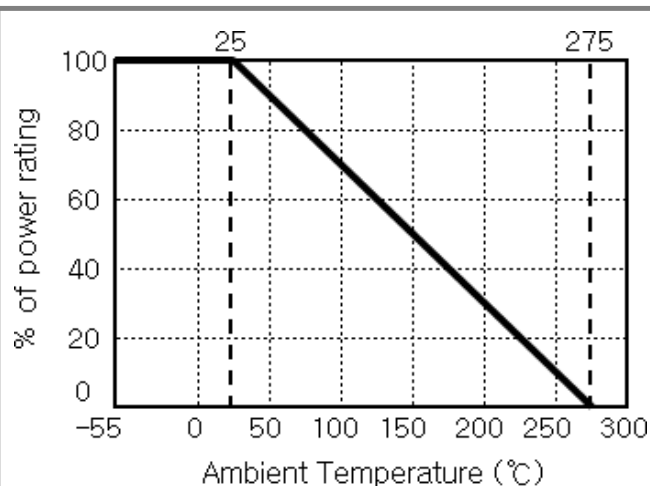




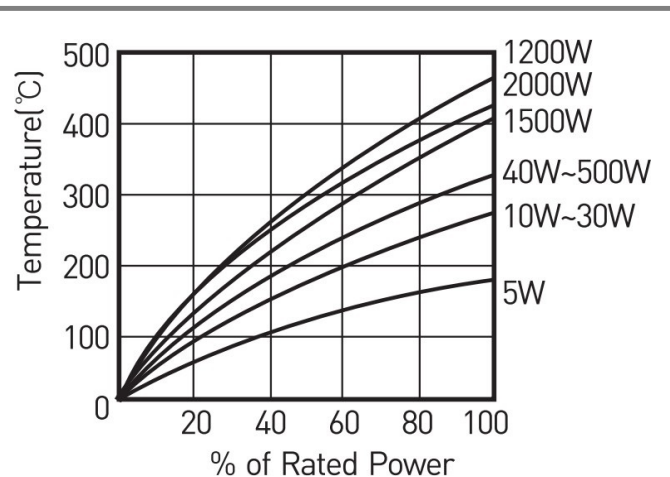
특 성 CHARACTERISTICS

TEST	Conditions	Test method
1. 사용온도범위 Operating Temp. Range	-55°C ~ +275°C	-
2. 절연저항 Insulation Resistance	100MΩ Min	DC500V, 1minute
3. 내전압 Dielectric Withstanding Voltage	±[0.1% + 0.05Ω]	1000VAC for 1minute
4. 온도계수 Temperature coefficient	±200ppm/°C Maximum	$TCR = \frac{(R_2 - R_1) \times 10^6}{R_1 \times (t_2 - t_1)}$ $t_1: 25^\circ\text{C}, t_2: 125^\circ\text{C}$ $R_1: \Omega \text{ at } t_1, R_2: \Omega \text{ at } t_2$
6. 납땜성 Solderability	75% coverage minimum	270°C ±5°C for 5 seconds
7. 내열성 Heat Resistance	±[2.0% + 0.05Ω]	275 ±5°C for 2hours
8. 단시간과부하 Short Time Overload	±[2.0% + 0.05Ω]	10×Power rating 5seconds
9. 단자강도 Terminal Strength	No mechanical damages	5~20W:4.5kgf, 20~40W:6kgf, 60~200W:8kgf, 300W~ :10kgf - 30sec
10. 부하수명 Load Life	±[5.0% + 0.05Ω]	25°C, Power rating 90minutes on, 30minutes off, 1000hours
11. 내습부하수명 Load Life in Humidity	±[3.0% + 0.05Ω]	40°C, 90~95RH, 0.1×Power rating, 90minutes on, 30minutes off, 1000hours
12. 내진동 Vibration	±[1.0% + 0.05Ω]	X-2 hours, Y-2 hours

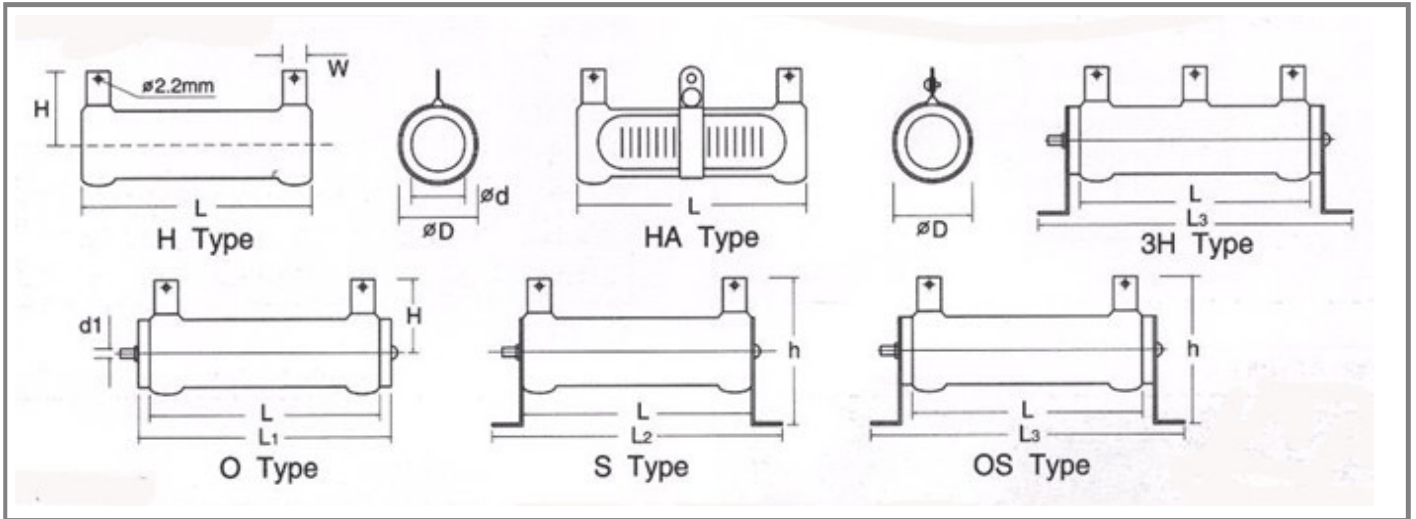
RATED POWER DERATING CURVE



TEMPERATURE RISE CURVE



■ 치 수 DIMENSIONS



■ 일반규격 및 치수 GENERAL SPECIFICATIONS & DIMENSIONS

형 명 Type	정격전력 Rated Wattage	저항치범위 Resistance Range(Ω)	치 수 Dimensions [mm]								
			L ± 3	L ₁ ± 3	L ₂ ± 3	L ₃ ± 3	$\phi D \pm 2$	W ± 0.5	H ± 1	h ± 2	d ₁
HRW 15	15W	0.1~15K	45	51	70	78	14	5	15	32	M3
HRW 20	20W	0.1~20K	50	56	75	93	18	5	19	40	M3
HRW 30	30W	0.1~30K	75	81	100	118	18	5	19	40	M3
HRW 40	40W	0.1~40K	90	96	115	133	18	5	19	40	M3
HRW 60	60W	0.3~50K	90	102	120	167	28	7	31	61	M4
HRW 80	80W	0.3~50K	115	127	140	192	28	7	31	61	M4
HRW 100	100W	0.5~50K	140	152	175	217	28	7	31	61	M4
HRW 120	120W	0.5~50K	165	177	195	242	28	7	31	61	M4
HRW 150	150W	0.5~100K	195	207	225	272	28	7	31	61	M4
HRW 200	200W	0.5~100K	254	266	285	331	28	7	31	61	M4
HRW 300	300W	0.5~100K	254	270	295	333	43	10	38	82	M6
HRW 400	400W	0.5~150K	330	346	370	409	43	10	38	82	M6
HRW 500	500W	0.5~150K	300	316	340	379	56	10	44	95	M6
HRW 600	600W	0.5~150K	330	346	370	409	56	10	44	95	M6
HRW 1000	1000W	0.5~200K	330	358	372	409	75	10	64	100	M6
HRW 1500	1500W	0.5~230K	420	448	470	498	77	20	71	130	M6
HRW 2000	2000W	0.5~270K	490	528	550	565	77	20	71	130	M6
HRW 3000	3000W	0.5~579K		600		674	80			148	
HRW 4000	4000W	0.5~750K		600		684	100			187	
HRW 5000	5000W	0.5~1M2		600		794	150			352	

◆ 3000W 이상 제품은 특별 주문 사양으로 세부 사양은 당사에 문의 주시기 바랍니다.

Watts over 3,000 watts are a special order specification. Please contact us.

■ 원자재 구성 MATERIALS

◆ CORE

-STEATITE CHEMICALLY INSERT WILL WITHSTAND SEVERE THERMAL SHOCK AND IMPERVIOUS TO MOISTURE.

◆ ELEMENT

-HIGHEST QUALITY COPPER - NICKEL ALLOY OR NICKEL CHROME ALLOY DEPENDING ON RESISTANCE VALUE
-SPECIAL ALLOY AVAILABLE UPON REQUEST

◆ COATING

-SPECIAL HIGH TEMPERATURE SILICONE.

■ 주문방법 HOW TO ORDER

HRW

1

100W(N)

2

J

3

200R

4

- | | |
|---------|--|
| 1. 형 명 | TYPE |
| 2. 정격전력 | RATED WATTAGE ("N"= Non Inductive winding 무유도 권선) |
| 3. 허용오차 | Tolerance |
| 4. 저항치 | Nominal Resistance
Ex) 1M2=1.2M Ω , 1K2=1.2K Ω , 1R2=1.2 Ω |