

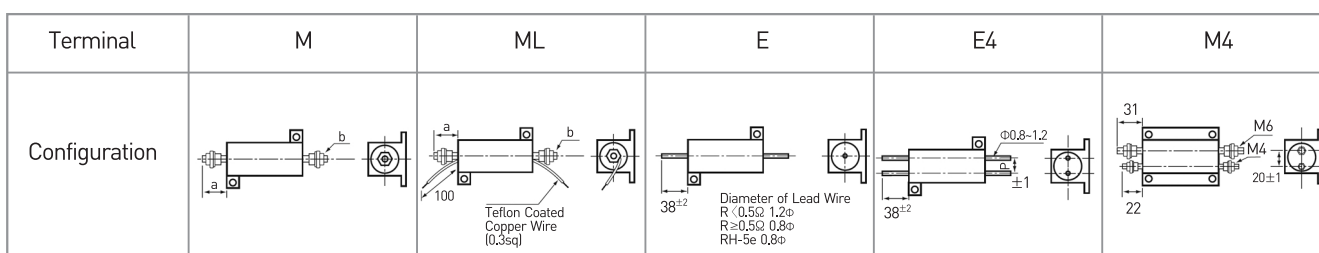
## Precision Type Metal Clad Resistors

- Ideal for current sensing applications.
- Small size, high power and ultra precise.
- Ultra precise resistors in low resistance value are available.
- Low temperature coefficient.
- Dielectric and insulation is strongly resistant to moisture and solvents.



### GENERAL SPECIFICATIONS

Model	Power Rating[W]		Terminal	Resistance Range[Ω]						Maximum Resistance	Maximum Current Running (A)	Max. Working (V)	Dielectric Withstanding Voltage
	*Chassis Mounted	In Free Air		Resistance Tolerance Minimum Resistance									
	±1% (F)	±0.5% (D)		±0.1% (B)	±0.05% (A)	±0.02% (Q)	±0.01% (T)						
RH-5E	2	1	2	0.02	0.1	1	2	20	30	150K	10	300	1000V
RH-10E	4	2	2	0.02	0.1	0.3	1	10	20	300K	14	300	
RH-10E4	4	2	4	0.02	0.02	0.05	0.1	0.2	20	300K	14	300	
RH-25E	6	3	2	0.02	0.1	0.5	1	10	20	600K	17	400	
RH-25E4	6	3	4	0.01	0.01	0.03	0.05	0.1	10	600K	24	400	2000V
RH-50E	10	4	2	0.02	0.1	0.5	1	10	20	3M	22	1,300	
RH-50E4	10	4	4	0.01	0.01	0.02	0.05	0.1	10	3M	25	1,300	
RH-50M	10	4	2	0.01	0.05	0.3	0.5	-	-	2M	31	1,300	
RH-50ML	10	4	4	0.001	0.005	0.01	0.02	0.05	5	2M	100	1,300	4500V
RH-75M	20	8	2	0.01	0.05	0.3	0.5	10	20	150K	44	1,300	
RH-75ML	20	8	4	0.001	0.001	0.001	0.005	0.01	1	150K	140	1,300	
RH-100M	30	12	2	0.01	0.05	0.1	0.3	10	20	350K	50	1,400	
RH-100ML	30	12	4	0.001	0.001	0.001	0.005	0.01	1	350K	170	1,400	4500V
RH-100M4	30	12	4	0.001	0.001	0.001	0.005	0.01	-	0.5	170	1,400	
RH-250M	50	20	2	0.01	0.05	0.1	0.3	10	20	600K	70	1,700	
RH-250ML	50	20	4	0.001	0.001	0.001	0.005	0.01	1	600K	200	1,700	
RH-250M4	50	20	4	0.001	0.001	0.001	0.005	0.01	-	0.5	200	1,700	



### CHARACTERISTICS

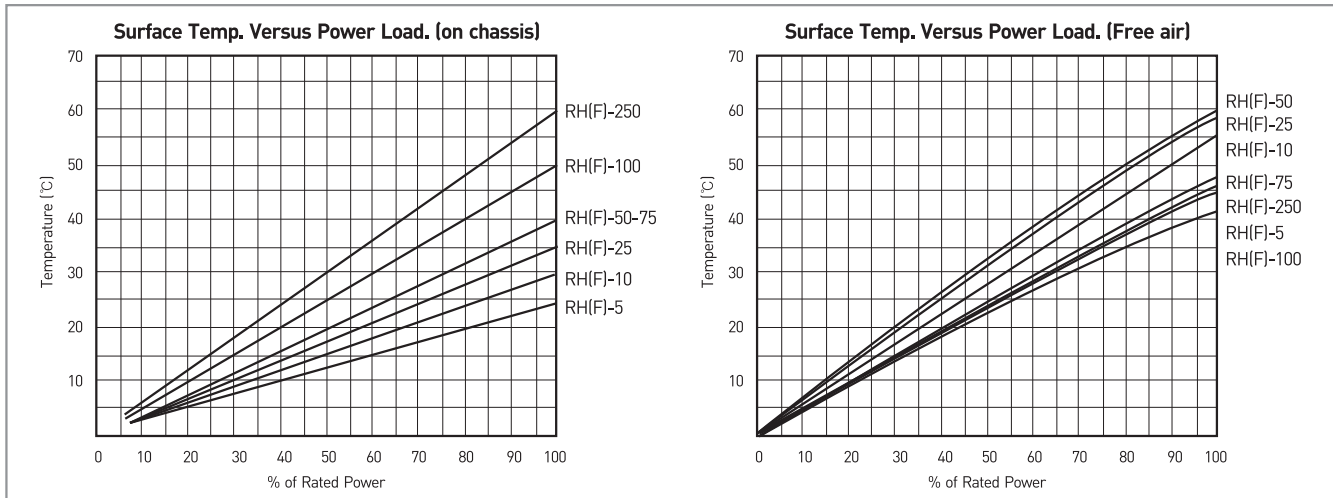
Values in [ ] mean change in Ω after test

Operation Temperature Range		-55°C ~ +125°C
Insulation Resistance	Over 1000M Ω	DC500V
Heat Resistance	±1.0%	150°C, 2hours
Vibration	±0.1%	10Hz-55Hz-10Hz(1minute) 2hours each of paralleled and right angle
Load Life	±0.2%	90minutes on, 30minutes off, 2000hours
Short Time Overload	±0.1%	2 x Power rating, 5seconds
Dielectric Withstanding Voltage	±0.02%	1 minute

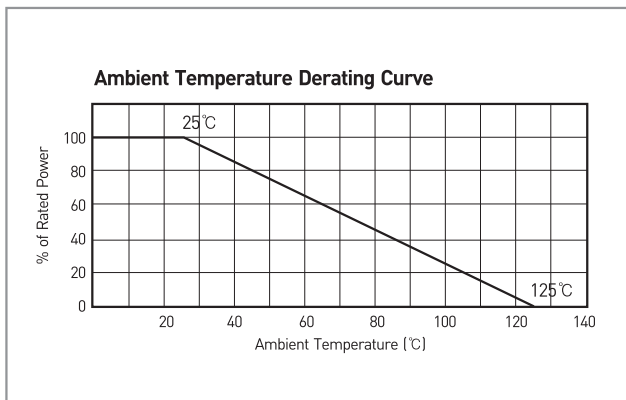
### TCR

Resistance[Ω]		1≤R	0.1≤R < 1	0.05≤R < 0.1	0.01≤R < 0.05	0.005≤R < 0.01	0.001≤R < 0.005
TCR (ppm/°C)	2 Terminal Type	±30	±50	±50	±100	-	-
	4 Terminal Type	±30	±30	±30	±50	±50	±50

## SURFACE TEMPERATURE INCREASE VERSUS POWER LOAD



## DERATING CURVE



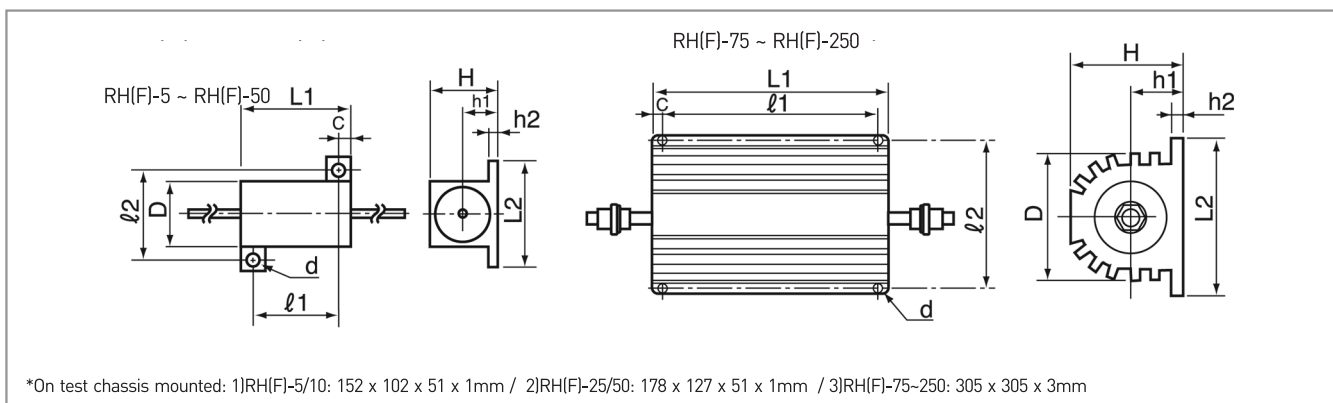
## ORDERING PROCEDURE EXAMPLE

Ordering Example	Model	Tolerance	Resistance	
RH100M4 B0R5	RH100M4	B( $\pm 0.1\%$ )	0.05 $\Omega$	Inductive
RHF100M4 A0R5	RHF100M4	A( $\pm 0.05\%$ )	0.05 $\Omega$	Non Inductive

Note :

- This RH/RHF series is designed for chassis mounting style and noted the following.
  - In order to mount the resistor tightly to chassis, mounting surface should be completely smooth.
  - On the mounting surface, -a product like heat grease should be liberally applied.
  - For RH(F)50M, RH(F)70, RH(F)250, use solderless terminal for the terminal and cable connection and fasten the nut using the following torques.  
 RH(F)50M : 0.6N·m MAX, RH(F)75 : 1.18~1.57N·m, RH(F)100, RH(F)250 : 1.96~2.35N·m (M4 terminal : 0.60~0.75N·m)

## DIMENSIONS[mm]



\*On test chassis mounted: 1)RH(F)-5/10: 152 x 102 x 51 x 1mm / 2)RH(F)-25/50: 178 x 127 x 51 x 1mm / 3)RH(F)-75-250: 305 x 305 x 3mm

Model	L1 $\pm 1$	L2 $\pm 0.8$	l1 $\pm 0.8$	l2 $\pm 0.8$	D $\pm 1$	H $\pm 0.8$	d $\pm 0.3$	c $\pm 0.8$	h1 $\pm 1$	h2 $\pm 0.5$	a $\pm 2$	b	P $\pm 1$
RH-5E	15.3	16.4	11.3	12.5	8.5	8	2.3	2	4	1.6	-	-	-
RH-10	19	20	14.3	15.9	10.8	10	2.4	2.4	5.3	2.4	-	-	5
RH-25	27	28	18.3	19.8	13.5	14	3.2	4.4	7.1	2.4	-	-	6
RH-50	49.2	29.2	39.7	21.4	15.1	16	3.2	4.8	8	2.5	13	M4	7
RH-75	66	52	56	42	32	33	4.8	5	16	3.2	22	M5	-
RH-100	88.9	71.4	69.9	57.2	46	44.5	4.8	9.5	19.5	4.8	25	M6	-
RH-250	114.3	76.2	98.4	63.5	54	55.6	4.8	7.9	25.4	6.4	31	M6	-