

客戶名稱 CUSTOMERS:			
日期 DATE:			
產品名稱 PRODUCT:	Power Wire Wound Resistors 大功率不燃性電阻器		
物料代號 PART NO.:	Customer		版本
	Queen Mao	PW series	REV.: V10.03

規 格 承 認 書

APPROVAL SHEET



客戶承認簽印 CUSTOMER APPROVED BY		核准 APPROVE	主管 CHIEF	承辦 RESPONSIBLE
APPROVED NO.:		ECN.:		/ /
MODEL:				/ /
CUSTOMER P/N:				/ /



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Power Wire Wound Resistors
大功率不燃性電阻器

1. 適用範圍 Scope

本承認書適用於[大功率不燃性電阻器]。
This specification covers Power Wire Wound Resistors.

2. 品質 Quality

本電阻器的製造係經高品質管理程序，並具有高信賴性的品質保證，且符合 RoHS 和無鹵要求。

The resistor is manufactured by highly quality-controlled process and guaranteed high reliability, it meets RoHS & Halogen-Free requirement.

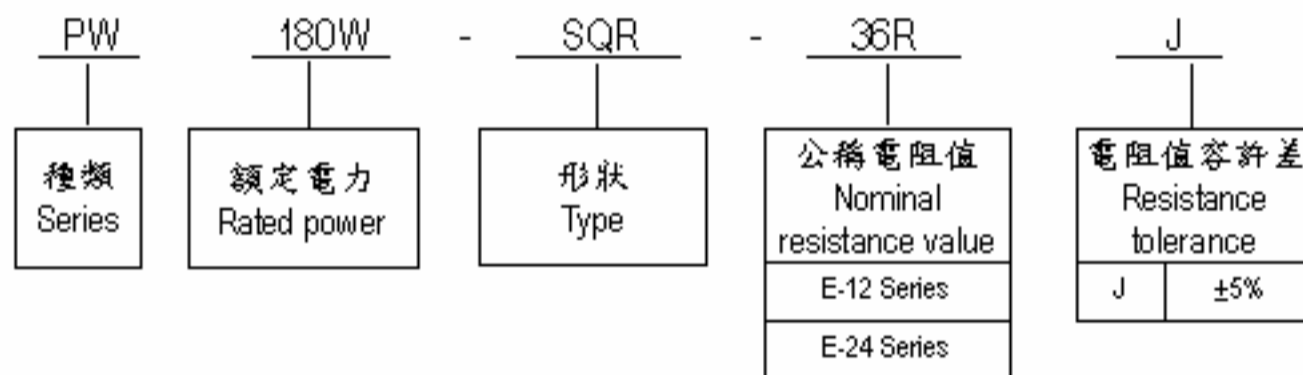
3. 標準試驗狀態 Standard measuring conditions

溫度 20±2°C、濕度 65±5%。
但在溫度 5~35°C、濕度 45~85%之情況下，仍可給予判定。
Temperature 20±2°C, Humidity 65±5%.

Being no doubt about the judgment, measurements can be made within the following Temperature 5~35°C, Humidity 45~85%.

4. 形名 (例) Type designation (example)

依使用種類、額定電力、形狀、公稱電阻值、電阻值容許差而區別，其構造如下：
The type designation shall be in the following form and as specified.



Examples

記號 Code	電阻值 Resistance value
0.12R	0.12 Ω
100R	100 Ω
1.2KR	1.2K Ω
10KR	10K Ω



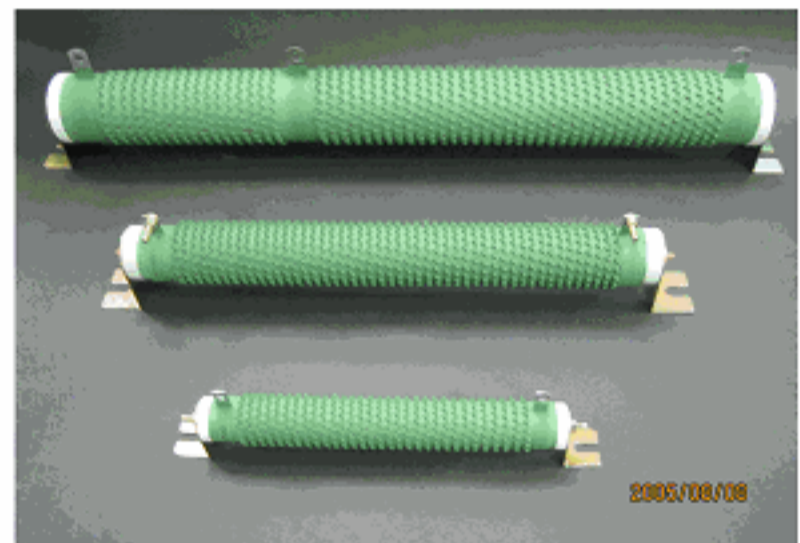
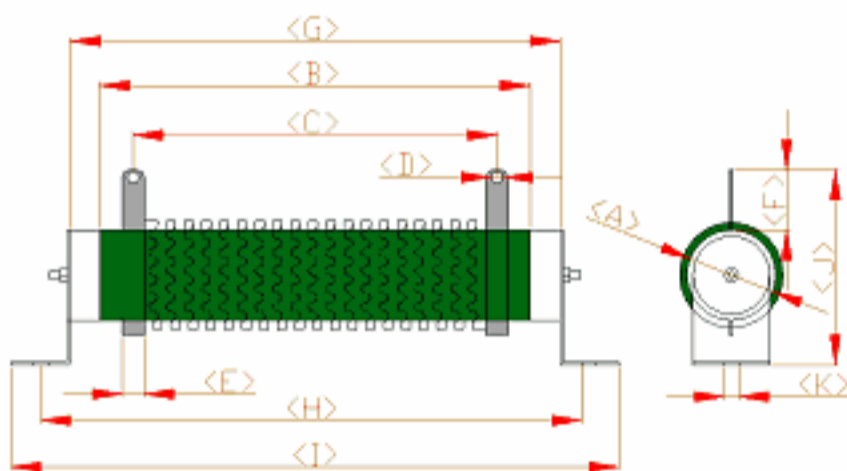
5. 外形寸法 External dimensions

PW series ◆大功率,低阻值型 . High Power, Low Resistance Type

QR Type : 固定電阻, Fixed Resistors

SQR Type : 可調電阻, Adjustable Resistors

NQR Type : 無感電阻, noninductive Resistors



規格表 Spec.

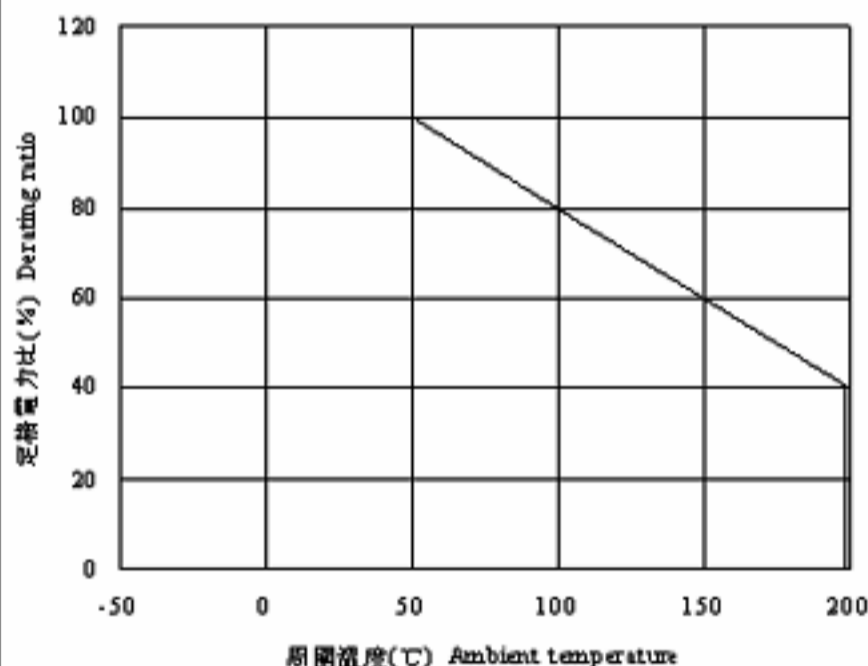
定格電力 (W) Power Rating	尺寸 Dimensions (mm)											電阻值範圍 (Ω) Resistance Range	備註 Remark
	A±1	B±2	C±2	D±0.1	E±0.2	F±1	G±2	H±2	I±2	J±2	K±0.1		
PW75W	25	110	94	5.2	8	19	120	142	164	58	6	0.1Ω ~ 8Ω	
PW90W	28	90	74	5.2	8	17	101	123	145	60	6	0.1Ω ~ 9Ω	
PW120W	28	110	94	5.2	8	17	121	143	165	60	6	0.2Ω ~ 12Ω	
PW150W	28	140	124	5.2	8	17	151	173	195	60	6	0.2Ω ~ 15Ω	
PW180W	28	160	144	5.2	8	17	171	193	215	60	6	0.2Ω ~ 18Ω	
PW225W	28	195	179	5.2	8	17	206	229	250	60	6	0.2Ω ~ 20Ω	
PW240W	35	185	167	5.2	8	18	197	219	245	75	8	0.5Ω ~ 25Ω	
PW300W	35	210	192	5.2	8	18	222	242	270	75	8	0.5Ω ~ 30Ω	
PW375W	40	210	186	5.2	10	19	222	242	270	77	8	0.5Ω ~ 40Ω	
PW450W	40	260	236	5.2	10	19	272	292	320	77	8	0.5Ω ~ 45Ω	
PW600W	40	330	306	5.2	10	19	342	380	390	77	8	0.5Ω ~ 60Ω	
PW750W	50	330	298	6.2	12	26	346	367	400	105	9	0.5Ω ~ 75Ω	
PW900W	50	400	368	6.2	12	26	416	437	470	105	9	1Ω ~ 90Ω	
PW1000W	50	460	428	6.2	15	26	480	505	533	105	9	1Ω ~ 100Ω	
PW1200W	60	460	425	6.2	15	28	480	505	533	112	10	1Ω ~ 120Ω	
PW1500W	60	540	505	6.2	15	28	560	585	613	112	10	1Ω ~ 150Ω	
PW2000W	65	650	615	6.2	15	30	667	690	720	130	10	1Ω ~ 200Ω	



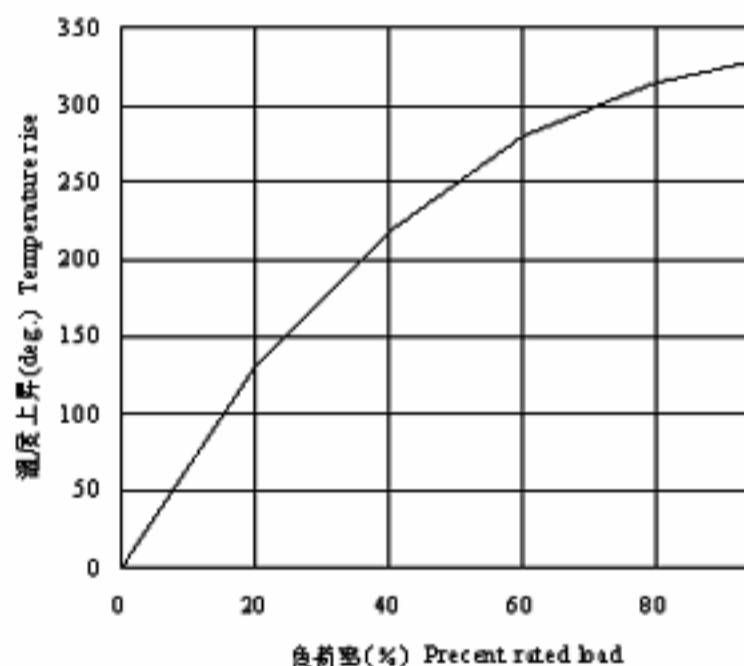
6. 特性 Characteristics

特性 Characteristics	規格值 Limits	
阻值和阻值的誤差 Resistance and resistance tolerance	Resistance nominal 1Ω > R	Resistance tolerance ±10% (K)
溫度係數 Temperatuer coefficient	±400ppm/°C max.	
額定負載 Power rating load	ΔR/R ≤ ±1%	
短時間過載 Short-time overload	表面溫度上昇 (tempoerature) 375°C max. 定額3倍5秒過載 300% rated power 5 seconds	
絕緣阻值 Insulation resistance	ΔR/R ≤ ±2%	
耐電壓 Dielectric withstanding voltage	DC500V 100MΩ mim. AC3000V 1 mintue	

負載減輕的線圖 Power Derating Curve



表面溫度上昇圖 Temperature Rise



短時間過載表 Short-time Overload Rating

負荷時間(Second) Load Time	5	10	30	60	180	300	600	900	1800
電流增加率(%) Max. Amps Rated load	400	350	250	200	140	120	110	105	100

NEMA 規格續斷週期表 MEMA standard / ON-OFF Cycling

時間週期 Cycling time	5 sec ON	10 sec ON	15 sec ON	15 sec ON	15 sec ON	15 sec ON
電流增加率(%) (Scand)	75 sec OFF	70 sec OFF	75 sec OFF	45 sec OFF	30 sec OFF	15 sec OFF
Max. Amps Rated load	290	215	185	160	150	125



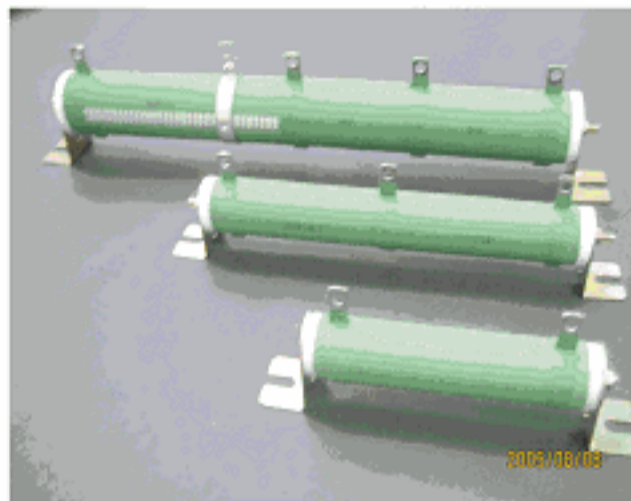
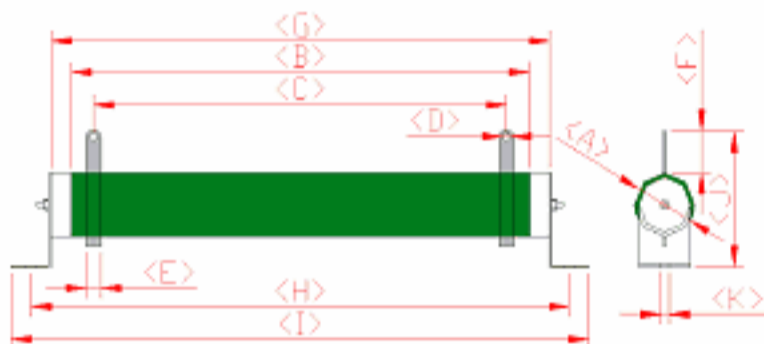
7. 外形寸法 External dimensions

PW series ◆電力型 . Power Type

PR Type : 固定電阻, Fixed Resistors

SPR Type : 可調電阻, Adjustable Resistors

NPR Type : 無感電阻, Noninductive Resistors



規格表 Spec.

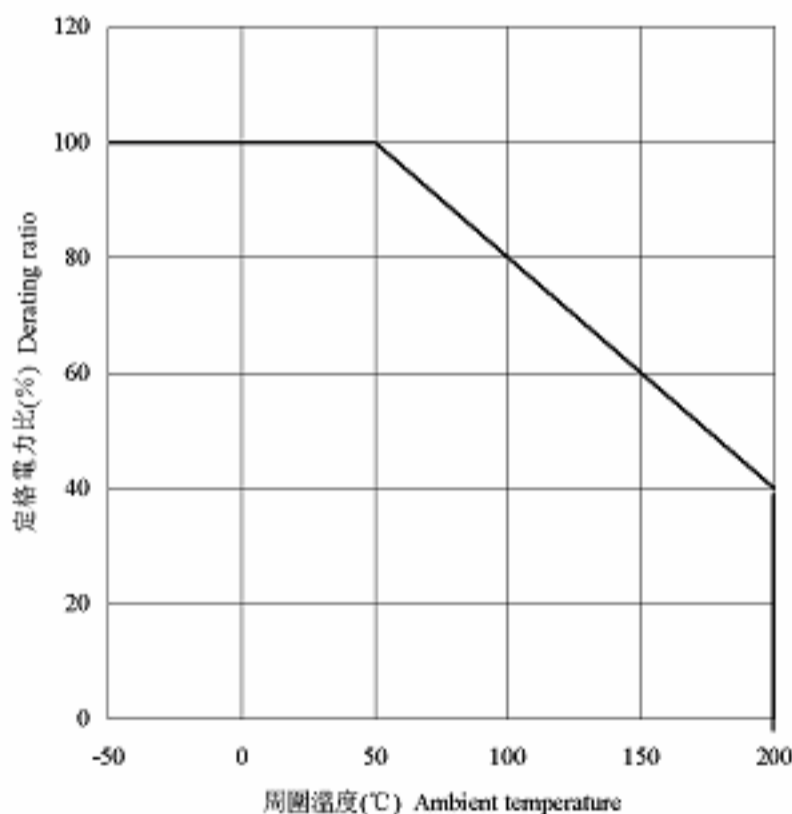
定格電力 (W) Power Rating	尺寸 Dimensions (mm)											電阻值範圍 (Ω) Resistance Range	備註
	A±1	B±2	C±2	D±0.1	E±0.2	F±1	G±2	H±2	I±2	J±2	K±0.1		
PW10W	12.5	45	35	2.1	4	10	47	59	76	30	4	1 Ω ~ 10K Ω	
PW20W	16.5	60	47	3	5	12	63	70	87	41	4	1 Ω ~ 20K Ω	
PW30W	16.5	80	67	3	5	12	82	104	120	41	4	1 Ω ~ 30K Ω	
PW40W	16.5	110	67	3	5	12	112	134	150	41	4	1 Ω ~ 40K Ω	
PW50W	25	110	94	5.2	8	19	120	142	164	58	6	0.1 Ω ~ 50K Ω	
PW60W	28	90	74	5.2	8	17	101	123	145	60	6	0.1 Ω ~ 60K Ω	
PW80W	28	110	94	5.2	8	17	121	143	165	60	6	0.1 Ω ~ 80K Ω	
PW100W	28	140	124	5.2	8	17	151	173	195	60	6	0.1 Ω ~ 100K Ω	
PW120W	28	160	144	5.2	8	17	171	193	215	60	6	0.1 Ω ~ 120K Ω	
PW150W	28	195	179	5.2	8	17	206	229	250	60	6	0.1 Ω ~ 150K Ω	
PW160W	35	185	167	5.2	8	18	197	217	245	75	8	0.1 Ω ~ 160K Ω	
PW200W	35	210	192	5.2	8	18	222	242	270	75	8	0.1 Ω ~ 200K Ω	
PW250W	40	210	186	5.2	10	19	222	242	270	77	8	0.5 Ω ~ 250K Ω	
PW300W	40	260	236	5.2	10	19	272	292	320	77	8	0.5 Ω ~ 300K Ω	
PW400W	40	330	306	5.2	10	19	342	380	390	77	8	0.5 Ω ~ 400K Ω	
PW500W	50	330	298	6.2	12	26	346	367	400	105	9	0.5 Ω ~ 500K Ω	
PW600W	50	400	368	6.2	12	26	416	437	470	105	9	1 Ω ~ 600K Ω	
PW700W	50	460	428	6.2	12	26	480	505	533	105	9	1 Ω ~ 700K Ω	
PW800W	60	460	425	6.2	15	28	480	505	533	112	10	1 Ω ~ 800K Ω	
PW1000W	60	540	505	6.2	15	28	560	585	613	112	10	1 Ω ~ 1M Ω	
PW1300W	65	650	615	6.2	15	30	667	690	720	130	10	1 Ω ~ 1.3M Ω	



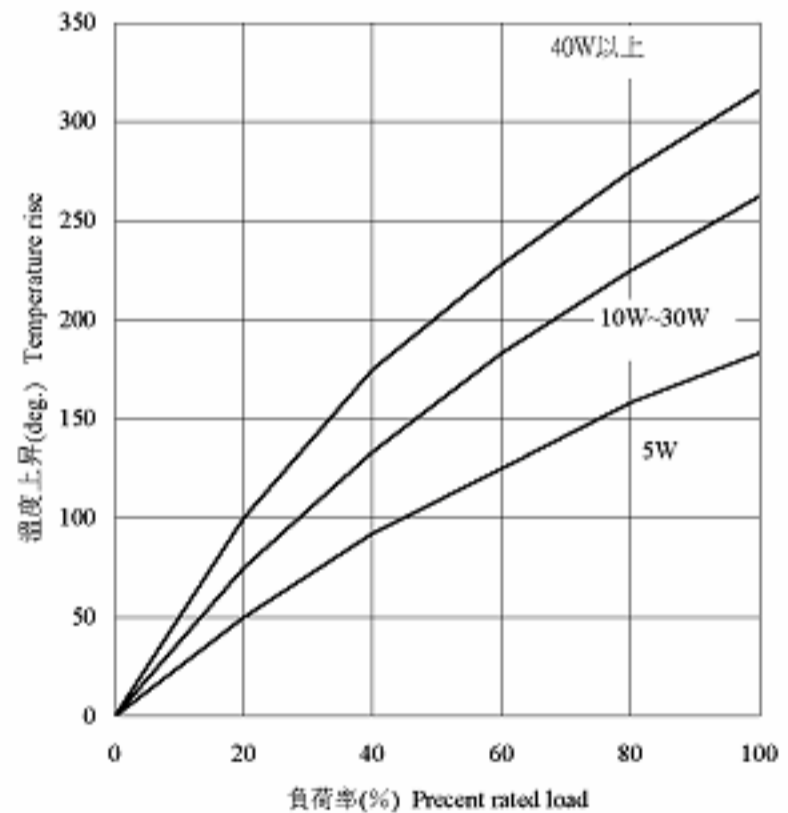
8. 特性 Characteristics

特性 Characteristics	規格值 Limits	檢驗方法 Test methods
阻值和阻值的誤差 Resistance and resistance tolerance	Resistance nominal $1\Omega \leq R$ $1\Omega > R$ Resistance tolerance $\pm 5\%$ (J) $\pm 10\%$ (K)	JIS-C-5202 5-1
溫度係數 Temperatuer coefficient	$\pm 200\text{ppm}/^\circ\text{C}$ max.	JIS-C-5202 5-2 b
額定負載 Power rating load	$\Delta R/R \leq \pm(1\% + 0.05\Omega)$ 表面溫度上昇 (tempoerature) 350°C max.	JIS-C-5202 5-4
短時間過載 Short-time overload	定額10倍5秒過載 1000% rated power 5 seconds $\Delta R/R \leq \pm(2\% + 0.05\Omega)$	JIS-C-5202 5-5
絕緣阻值 Insulation resistance	DC500V $100\text{M}\Omega$ mim.	JIS-C-5202 5-6
耐電壓 Dielectric withstanding voltage	AC3000V 1 mintue	JIS-C-5202 5-7

負載減輕曲線圖 Power Derating Curve



表面溫度上昇圖 Temperature Rise



短時間過載表 Short-time Overload Rating

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