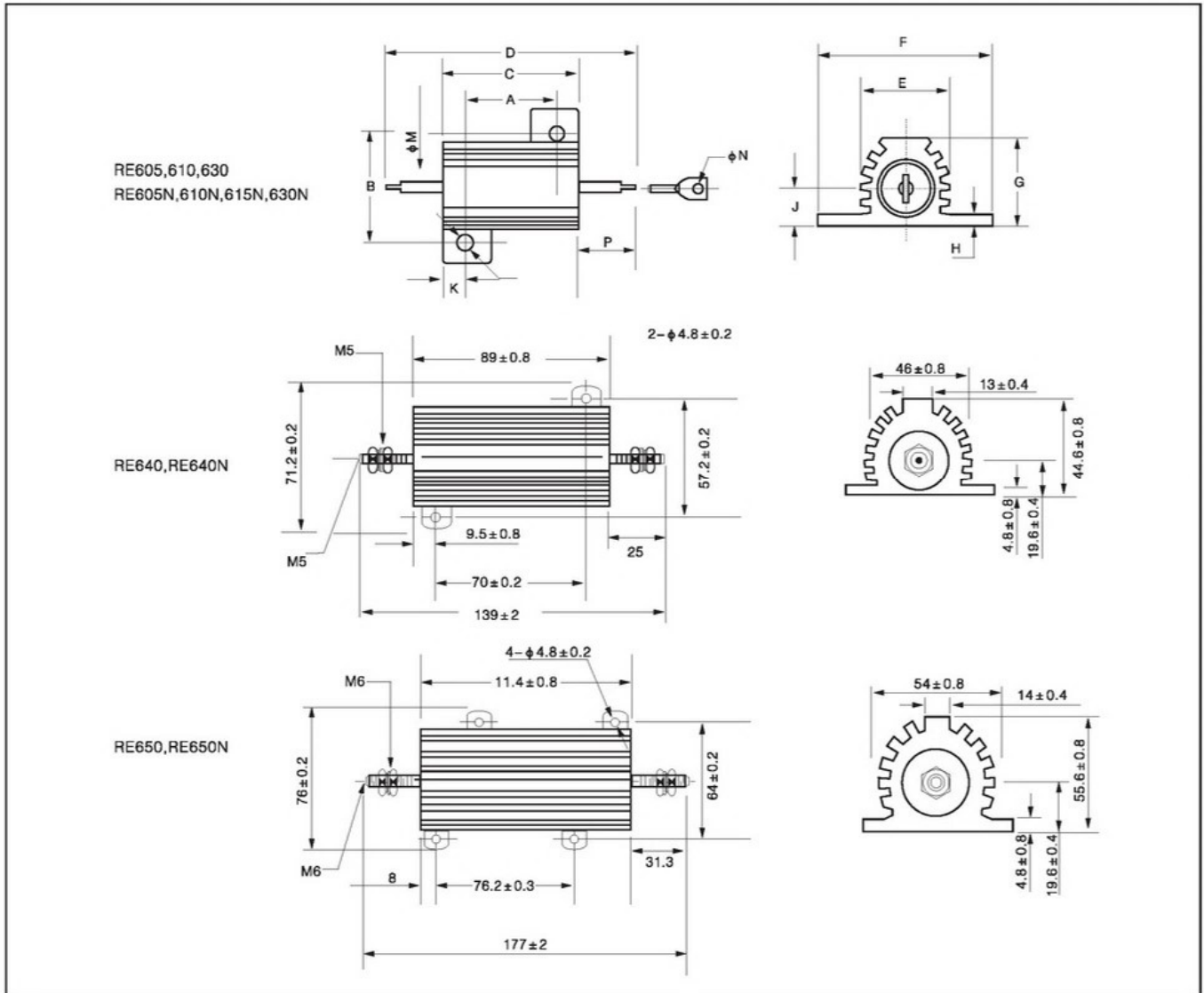


■ 特点 Characteristics

- 具有环境保护的模压结构
- 完全熔焊结构
- 符合MIL-PRF-18546军用规范
- 对低电抗元件采用无感绕制
- 安装于基板上应用热吸收效应
- 产品具有极好的稳定性
- Molded construction for environmental protection
- Complete welded construction
- Meets applicable requirements of Mil-PRF-18546
- Available in non-inductive styles with Aryton Perrywinding for lowest reactive components
- Mounts on chassis to utilize heat-sink effect
- Excellent stability in operation

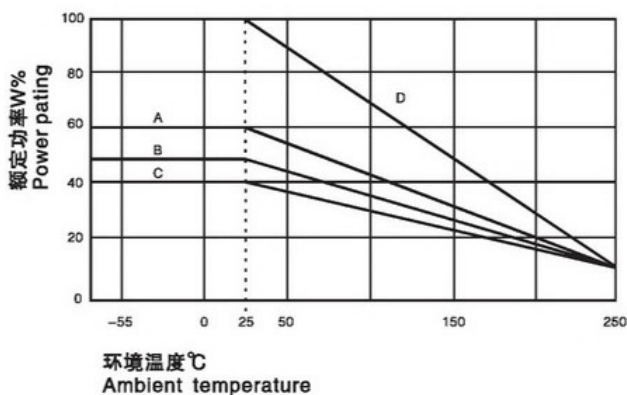
■ 构造图 Construction(mm)



■ 外形尺寸 Dimensions(mm)

型号 Type	外形尺寸 Dimensions(mm)													
	A±0.1	B±0.1	C±0.2	D±1.5	E±0.4	F±0.1	G±0.4	H±0.2	J±0.2	K±0.2	L±0.1	M±0.02	N±0.1	P±0.8
RE605	11.2	12.5	15.2	28.6	8.5	16.4	8.1	1.7	3.8	2	2.4	1.5	1.3	6.7
RE610	14.2	15.9	19	34.9	10.7	20.3	9.9	1.9	4.2	2.4	2.4	2	2.2	8.0
RE615	18.2	19.8	27	49.2	14	27.4	13.1	1.9	5.9	4.4	3.2	2	2.2	11.1
RE630	40	21.4	50	70.6	16	29	15.5	2.2	6.6	5	3.2	2	2.2	10.3

■ 降功耗曲线 Derating Curve



■ 额定功率 Rated Power

RE电阻器额定功率下工作须依据下列尺寸安装热吸收板 (单位: mm)。

(RE resistor power ratings are to be mounted with the following heat sink):

RE 7.5W/12.5W: 102 × 152 × 51 × 1mm

RE 25W: 127 × 178 × 51 × 1mm

RE 50W: 305 × 305 × 1.5mm

RE 100W/250W: 305 × 305 × 3.2mm

RE 75W: 305 × 305 × 1.5mm

RE 150W: 305 × 305 × 3.2mm

RE 300W: 610 × 610 × 3.2mm

■ 环境温度与降功耗曲线 Ambient Temperature vs Derating Curve

RE电阻器在环境温度大于25℃时所需的降功耗曲线图。

(Derating is required for ambient temperatures above 25, see the following graph.)

A, B, C曲线时适用于没有安装热吸收板的RE电阻器降功耗曲线;

(Curves A, B, C apply to operation of unmounted resistors;)

D曲线是适用于所有安装热吸收板RE电阻器的降功耗曲线。

(Curves D applies to all types mounted with specified heat sink.)

A: RE605, 610不安装(unmounted)。

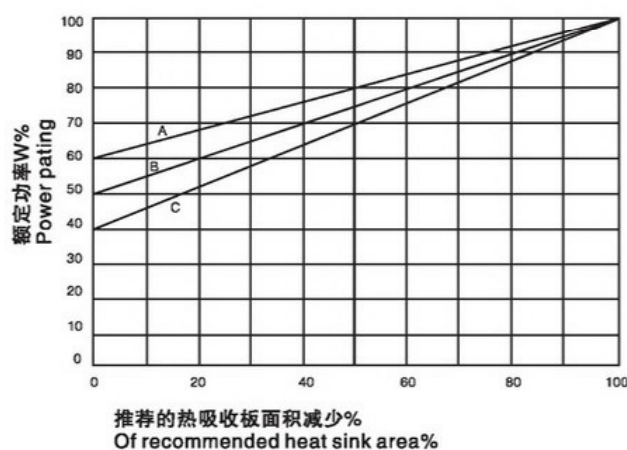
B: RE615不安装(unmounted)。

C: RE630, 640, 650不安装(unmounted)。

D: 曲线是适用于所有安装热吸收板RE电阻器的降功耗曲线。

(D: All types mounted with recommended aluminum heat sink.)

■ 热吸收板的降功耗曲线 Derating Curve of Heatsink



■ 减少热吸收板的降功耗曲线 Reduced Heat Sink Derating Curve

当推荐安装的热吸收板面积被减少时, 电阻器需要降功耗使用。

(Derating is also required when recommended heat sink area is reduced.) A: RE605, 610

B: RE615

C: RE630, 640, 650

■ 技术说明 Technical Specifications

型号 Type	MIL-PR F-18548TYPE	额定功率P25°C Rated power(W)		阻值范围 Resistance Range			绝缘电压 (AC)	温度系数 (10 ⁻³ /K)
		民用(Civil)	军用(Military)	±0.25%	±0.5%	±1%, ±5%, ±10%		
RE605	-	7.5(5)		R50~1K2	R10~1K2	R10~3K0	1000V	±20
	RE60G		5	-	-			
RE605N	-	7.5(5)		1R0~200R	1R0~860R	1R~1K5		
	RE60N		5	-	-			
RE610	-	12.5(10)		R50~2K7	R10~2K7	R10~4K7		
	RE65G		10	-	-			
RE610N	-	12.5(10)		1R0~1K2	1R0~1K2	1R0~2K0		
	RE65N		10	-	-			
RE615	-	25		R10~3K9	R10~3K9	R1~10K		
	RE70N		20	-	-			
RE615N	-	25		1R0~2K7	1R0~2K7	1R0~4K7		
	RE70N		20	-	-			
RE630	-	50		R10~5K6	R10~5K6	R1~12K	2000V	±50
	RE75G		30	-	-			
RE630N	-	50		1R0~3K9	1R0~3K9	1R0~5K0		
	RE75N		30	-	-			
RE640	-	100		R05~10K	R5~12K	R5~18K	4500V	±100
	RE77G		50	-	-			
RE640N	-	100		R05~5K	1R0~5K6	1R0~9K0		
	RE77N		50	-	-			
RE650	-	120		R10~20K	R10~20K	R10~25K		
	RE80G		60	-	-			
RE650N	-	120		1R0~8K2	1R0~8K2	1R0~12K		
	RE80N		60	-	-			

注：RE605,610 电阻器上标明的是括号内功率，新的结构允许电阻器具有更高功率，但只有客户要求，才能打印更高功率。
0.1%或更高阻值精度的非标电阻器可协商定制生产。

NOTE:Figures in parentheses on RE605 & RE610 is wattage,same as that value on parts,wattage printed on parts,new construction allows these resistors to be rated at higher wattage but will only be printed with the higher wattage on customer request.Please contact us for the production of non-standard resistors with the higher tolerance or 0.1%.

■ 材料说明 Material Specifications

Material Specifications

电阻丝：铜镍合金或镍铬合金，依据阻值大小而定

Element:Copper-nickel alloy or nickel-chromium alloy depending on resistance value

芯料：陶瓷或滑石瓷依据物理尺寸而定

Core:Ceramic,steatite,depending on physical size

密封材料：硅酮模压塑料

Encapsulant:Silico molded materials

外壳：阳极氧化铝外壳

Housing:aluminium with hard anodic coating

帽盖：不锈钢 End Caps:stainless steel

引出端子：RE605-RE630是镀锡铜

RE640,650是带螺纹的不锈钢棒

Standard Terminals:Tinned Copperwires on RX24 7.5W CMEL

RE 50W Threaded stainless steel terminals on

RE 100W/250W

打印标识：公司商标、日期、公差、型号、功率、阻值

Part Marking:VTM,Model,Wattage,Value,Tolerance,Date Code

■ 特殊改变 Special Modifications

铝外壳电阻可依据客户要求作如下改变：

Some modifications one available on customer request the details as follow:

引出端形状或材料

Terminal configurations and materials

阻值公差 Resistance values and tolerances

低温度系数 Low TCR

外壳外形 Housing contiguration

安装孔螺纹 Thread of mounting hole

预处理和其他附加实验

Pre-processing and other additional testing

■ MIL规范应用

APPLICABLE MIL SPECIFICATIONS

MIL-PRF-18546军用规范涵盖了基板安装功率型铝外壳电阻器。

MIL-PRF-18546 is the military specification Covering aluminum housed, chassis mount, power resistors.

■ 无感电阻 Non-inductive resistance

可以通过无感绕制的方法得到具有相同物理和电气特性的产品，并在型号后面加注“N”的方式加以区分

Same physical and electrical characteristics as the normal one are available for non-inductive resistor, also, they are defined by adding another letter N after the model number(RE605N,for example)

■ 性能指标 Performance

试验项目 Test Item	性能要求 Specifications	试验方法 Test Methods
温度冲击 Thermal shock	$\Delta R \leq \pm (0.5\%R + 0.05\Omega)$	$P_R / -55^\circ\text{C}$, 15min
短期过载 Short time overload	$\Delta R \leq \pm (0.5\%R + 0.05\Omega)$	$\sqrt{5R_P}$, 5S
耐电压 Dielectric withstanding voltage	$\Delta R \leq \pm (0.2\%R + 0.05\Omega)$	RE605-RE615 1000V _{AC} RE630 2000V _{AC} RE640-RE650 4500V _{AC}
耐潮湿 Moisture proof	$\Delta R \leq \pm (1.0\%R + 0.05\Omega)$	40°C, RH93±3%, 240h
碰撞 Shock proof	$\Delta R \leq \pm (0.2\%R + 0.05\Omega)$	100g, 6ms, 10cycles
高频率振动 Vibration with high frequency	$\Delta R \leq \pm (0.2\%R + 0.05\Omega)$	10~200HZ, 20g, 6h
长期寿命 Load life	$\Delta R \leq \pm (1.0\%R + 0.05\Omega)$	25°C, P _R , 1000h