



● 特点Features

- I 功率大且坚固,耐震
High power and rugged, shock-proof
- II 散热性好
Good heat-sink
- III 电阻温度系数小,呈直线变化
Low TCR, and good linearity

● 应用Applications

- I 适用于大型机械设备 Used in large-size machinery
- II 负荷测试, 电力电源 Load test, power supply and electricity
- III 变频器 Frequency inverter
- IV 伺服电机及高要求等恶劣工控环境 Serve motor and other harsh industry environment

● 材料说明 Material Specifications

- I. 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
- II. 芯料: 陶瓷或滑石瓷依据物理尺寸而定 Core: Ceramic, steatite, depending on physical size
- III. 密封材料: 硅酮模压塑料 Encapsulant: Silico molded materials
- IV. 外壳: 阳极氧化铝外壳 Housing: aluminium with hard anodic coating
- V. 帽盖: 不锈钢 End Caps: stainless steel
- VI. 引出端子: 带螺纹的不锈钢棒 Standard Terminals: Threaded stainless steel terminals

● MIL规范应用Applicable MIL Specifications

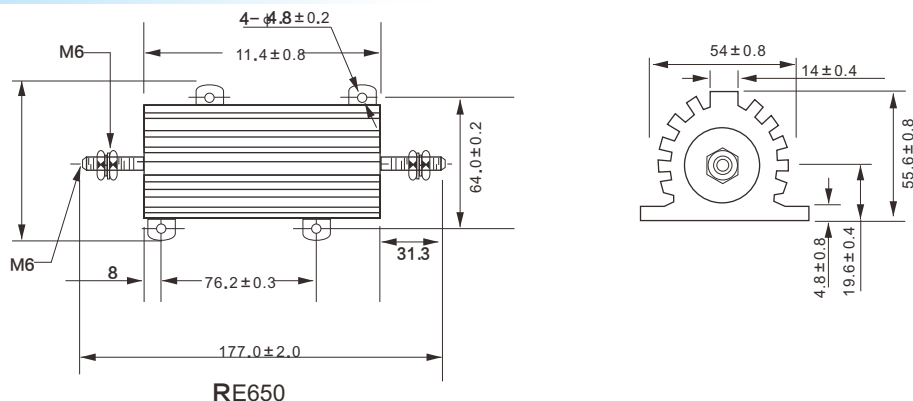
MIL-PRF-18546 军用规范涵盖于基板安装功率型铝外壳电阻器。

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 (RE650N, for example)

● 尺寸构造图 Construction (mm)



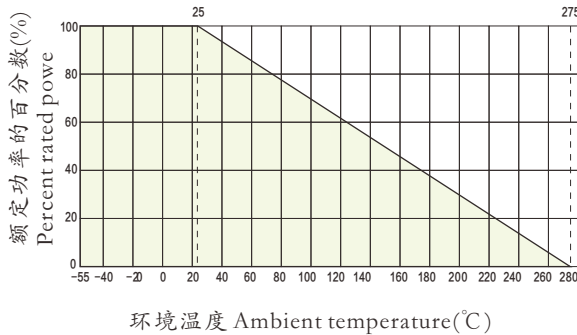
● 参考规格Reference Standards

Q/ATK035-2002

● 功率、阻值范围与耐电压PowerAnd Resistance etc

型号 Type	MIL-PR F-18546TYPE	额定功率P25℃ Rated power(W)		阻值范围 Resistance Range		
		民用(Civil)	军用(Military)	±0.25%	±0.5%	±1%± 5%, ±10 %
RE650	-	250		R10~27K	R10~27K	R10~35K7
	RE80G		120	-	-	
RE650N	-	250		1R0~8K2	1R0~8K2	1R0~17 K4
	RE80N		120	-	-	

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



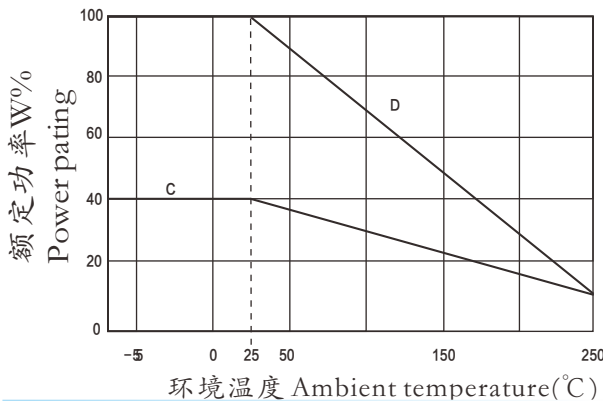
额定功率 Rated Power

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):

RE650:305×305×3.2mm(1896cm²)

● 降功耗曲线 Derating Curve



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。

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

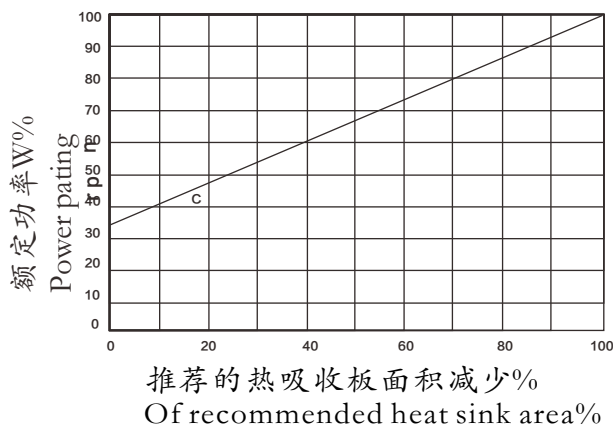
C曲线适用于没有安装热吸收板的RE电阻器降功耗曲线;

(Curves 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.)

● 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.)C:RE650

● 特殊改变 Special Modifications

- I.引出端形状或材料 Terminal configurations and materials
- II.阻值公差 Resistance values and tolerances
- III.低TCR Low TCR
- IV.外壳外形 Housing configuration
- V.安装孔螺纹 Thread of mounting hole
- VI.预处理和其他附加实验 Pre-processing and other additional testing

● 性能 Performance

试验项目 Test Item	单位 UNIT	试验方法 Test Methods
温度系数 TCR	ppm/°C	0.1Ω ~0.99Ω: ± 50ppm/°C、± 100ppm/°C ≥1Ω: ± 20ppm/°C、± 50 ppm/°C、± 100ppm/°C
绝缘电阻 Insulation resistance	VAC	RE650为4500VAC
短期过载 Short time overload	-	5倍额定功率, 5秒钟 5xreter power for 5s
最大工作电压 Max. Working voltage	V	$\sqrt{P \cdot R}$
绝缘电阻 Insulation Resistance	Ω	干燥: ≥10000MΩ 潮湿试验: ≥1000MΩ 10000Megohm: minimum, 1000Megohm: minimum after moisture test
引出端强度 Terminal tensile strength	N	RE650为44.1N / 44.1N for RE650
可焊性 Solderability	-	符合MIL-PRF-18546标准, 符合ANSI J-STD-002标准
温度范围 Temperature range	°C	-55/+250

● 料号编号 Ordering Information

例 Example:

RE650	250	J	100R0	C2
型号	额定功率	误差值	电阻值	温度系数
RE650	650:250W	F = ± 1% G = ± 2% J = ± 5% K = ± 10%	0R100=0.1Ω 1R00=1Ω 10R0=10Ω 100R0=100Ω	C4= ± 20PPM/°C C2= ± 50PPM/°C C1= ± 100PPM/°C