

● 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

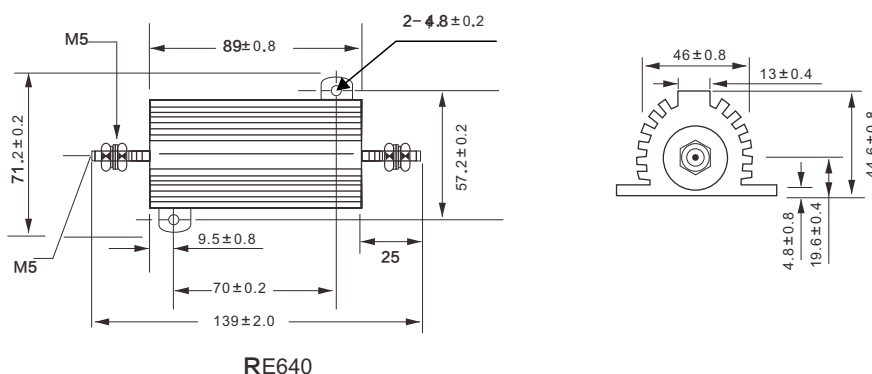
● MIL规范应用Applicable MIL Specifications

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 (RE640N, for example)

● 尺寸构造图 Construction (mm)



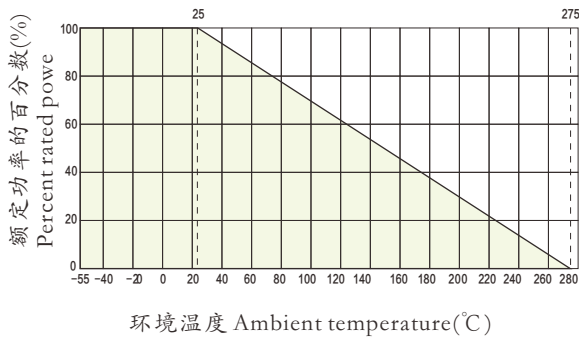
参考规格 Reference Standards

Q/ATK035-2002

功率、阻值范围与耐电压 Power And Resistance etc

型号 Type	MIL-PR F-18546TYPE	额定功率 P25°C Rated power(W)		阻值范围 Resistance Range		
		民用(Civil)	军用(Military)	±0.25%	±0.5%	±1%± 5%, ±10 %
RE640	-	100		R 10~8 K2	R5~12K	R5~29K4
	RE77G		75	-	-	
RE640N	-	100		1R0~5 K6	1R0~5K6	1R0~14K7
	RE77N		75	-	-	

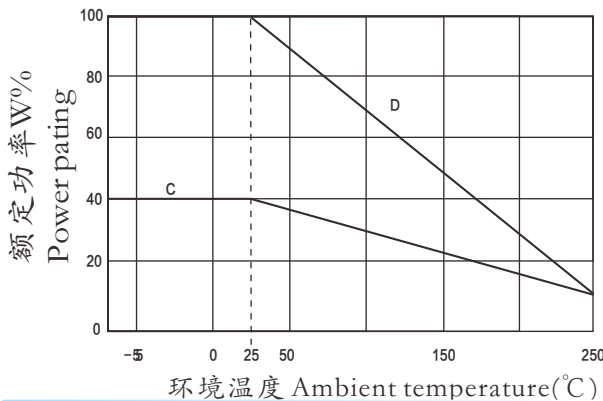
加热吸收板的降功耗曲线 Derating Curve of Heatsink



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):
RE640: 305 × 305 × 3.2mm (1896cm²)

降功耗曲线 Derating Curve

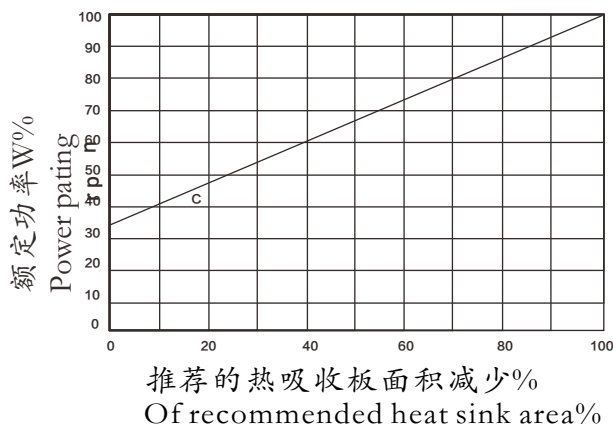


环境温度与降功耗曲线

Ambient Temperature vs Derating Curve

RE电阻器在环境温度大于25°C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: RE640

● 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	单位于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	RE640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	RE640为44.1N 44.1N for RE640
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:

RE640	640	J	100R0	C2
型号	额定功率	误差值	电阻值	温度系数
RE640	640:100W	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