

特点

- 阻值区间为0.001Ω至50Ω
- 额定功率达50W
- 阻值精度为0.1%
- 温度系数为±10ppm/K
- 极低感抗
- 负载稳定性达0.1%



RoHS*
COMPLIANT

表1-参数

型号	FHR 4-3825, FHR 4-3825H, FHR 4-4618	
阻值区间	0.001 to 100 Ohms	
额定功率	置于空气中70°C时	3W / 5W for 3825H
	加装散热器	50W
精度 自0R001开始	0.1% / 0.25% / 0.5% / 1% / 2% / 5%	
热阻值	1.6 K/W	
稳定性 (1000h)	0.1% / 0.2% / 0.5% (同时取决于压力大小)	
温度系数 0.001 to 100 Ohms (Q) 可选 (P) 更高的性能参数需求请联系我们	±25ppm/K (20 to 60°C) ±50ppm/K (-40 to 130°C) ±10ppm/K (20 to 60°C)	
耐压值	500 VDC	
最大电流	150 A / 200 A F型连接	
热电势	< 1μV/K	
工作温度区间	-40至130 °C	
电阻元素材料	锰铜镍合金箔片	
基板	阳极氧化铝	
保护层	环氧树脂	
电极材料	铜镀锡	
引脚数	4	
最大扭矩	1 Nm	

标准选型表

零件编号 - 阻值 - 连接方式 - 精度 - 温度系数
FHR 4-4618 0R050 F 1% Q
FHR 4-3825H 1R140 A 0.1% N

图1-温度系数曲线

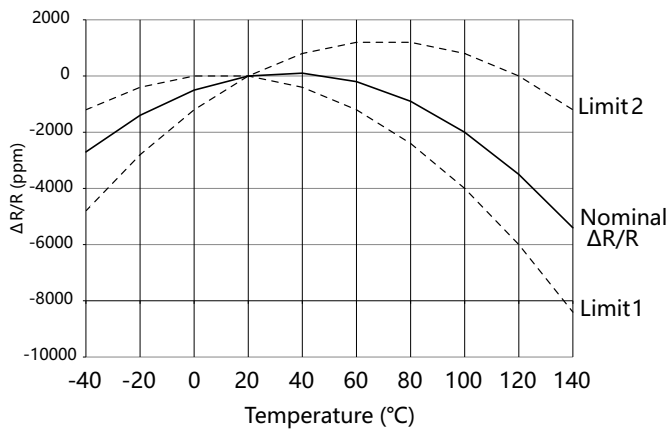
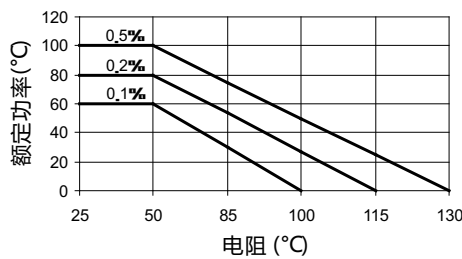


图2-降功耗曲线



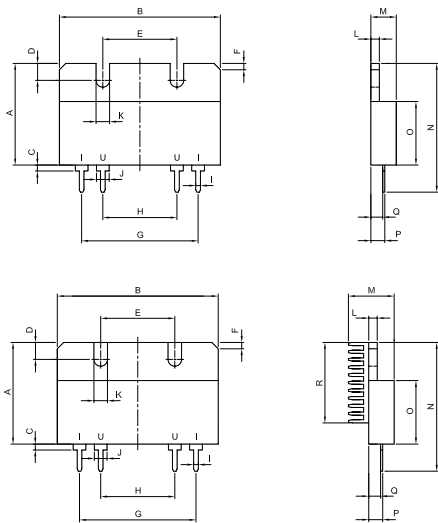
额定功率备注 -
FHR系列电阻需连接到适合的散热器上使用。
电阻内部最大温度为130°C.使用以下公式求得与电阻适合的散热器：

$$R_{\theta H} = \frac{T_{MAX} - (P \times R_{\theta R}) - T_A}{P}$$

其中：
 $R_{\theta H}$ = 散热器的热阻 (K/W)
 $R_{\theta R}$ = 电阻的热阻 (K/W)
 T_{MAX} = 电阻最大工作温度
 T_A = 散热器的环境温度 (°C)
 P = 电阻器的功率 (W)

图3-尺寸 mm

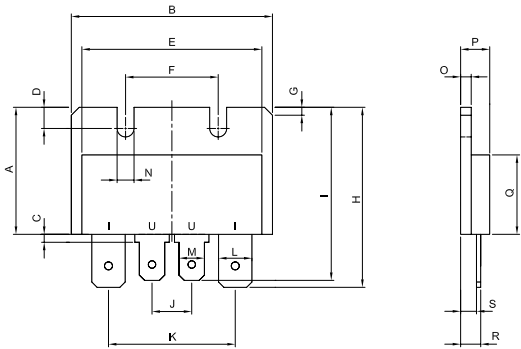
FHR 4-3825 / FHR 4-3825H



尺寸		A-连接	K-连接
A ±0.2 (±0.008)		24.00 (0.94)	
B ±0.3 (±0.012)		38.00 (1.50)	
C ±0.1 (±0.004)		1.40 (0.06)	
D ±0.1 (±0.004)		4.00 (0.16)	
E ±0.2 (±0.008)		17.50 (0.69)	
F ±0.1 (±0.004)		1.5x45° (0.06x45°)	
G ±0.2 (±0.008)		27.50 (1.08)	
H ±0.2 (±0.008)		17.50 (0.69)	
I ±0.1 (±0.004)		1.50 (0.06)	1.10 (0.04)
J ±0.1 (±0.004)		3.00 (0.12)	
K ±0.1 (±0.004)		3.20 (0.13)	
L ±0.1 (±0.004)		2.00 (0.08)	
M ±0.2 (±0.008)	标准型	6.00 (0.24)	
M ±0.2 (±0.008)	H型	10.80 (0.43)	
N ±0.4 (±0.016)		30.40 (1.20)	
O ±0.2 (±0.008)		15.00 (0.59)	
P ±0.3 (±0.012)	R > 0R001	3.60 (0.14)	3.30 (0.13)
	R ≤ 0R001	4.10 (0.16)	----
Q ±0.3 (±0.012)	R > 0R001	2.80 (0.11)	
	R ≤ 0R001	3.30 (0.13)	
R ±0.2 (±0.008)		19.00 (0.75)	

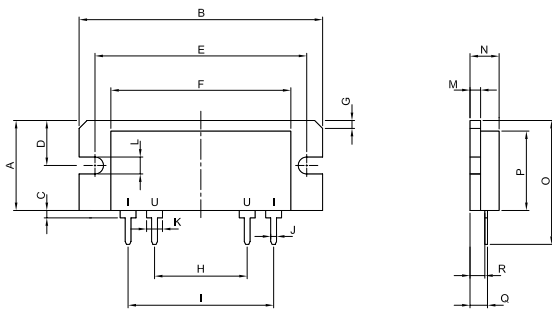
图3-尺寸 mm

FHR 4-3825 F-contact



尺寸	
A ± 0.2 (± 0.008)	24.00 (0.94)
B ± 0.3 (± 0.012)	38.00 (1.50)
C ± 0.2 (± 0.008)	1.50 (0.06)
D ± 0.1 (± 0.004)	4.00 (0.16)
E ± 0.3 (± 0.012)	34.00 (1.34)
F ± 0.2 (± 0.008)	17.50 (0.69)
G ± 0.1 (± 0.004)	1.5x45° (0.06x45°)
H ± 0.2 (± 0.008)	34.00 (1.34)
I ± 0.2 (± 0.008)	32.70 (1.29)
J ± 0.2 (± 0.008)	7.50 (0.30)
K ± 0.2 (± 0.008)	24.00 (0.94)
L ± 0.2 (± 0.008)	6.30 (0.25)
M ± 0.1 (± 0.004)	4.80 (0.19)
N ± 0.1 (± 0.004)	3.20 (0.13)
O ± 0.1 (± 0.004)	2.00 (0.08)
P ± 0.2 (± 0.008)	6.00 (0.24)
Q ± 0.2 (± 0.008)	15.00 (0.59)
R ± 0.7 (± 0.028)	4.10 (0.16)
S ± 0.7 (± 0.028)	3.30 (0.13)

FHR 4-4618



尺寸	A-连接	K-连接
A ± 0.1 (± 0.004)	17.00 (0.67)	
B ± 0.3 (± 0.012)	46.00 (1.81)	
C ± 0.4 (± 0.016)	1.40 (0.06)	
D ± 0.2 (± 0.008)	8.50 (0.33)	
E ± 0.3 (± 0.012)	40.00 (1.57)	
F ± 0.3 (± 0.012)	34.00 (1.34)	
G ± 0.1 (± 0.004)	1.5x45° (0.06x45°)	
H ± 0.2 (± 0.008)	17.50 (0.69)	
I ± 0.2 (± 0.008)	27.50 (1.08)	
J ± 0.1 (± 0.004)	1.50 (0.06)	1.10 (0.04)
K ± 0.1 (± 0.004)	3.00 (0.12)	
L ± 0.1 (± 0.004)	3.20 (0.13)	
M ± 0.1 (± 0.004)	2.00 (0.08)	
N ± 0.2 (± 0.008)	max.5.5 (0.22)	
O ± 0.4 (± 0.016)	23.40 (0.92)	
P ± 0.2 (± 0.008)	15.00 (0.59)	
Q ± 0.3 (± 0.012)	3.60 (0.14)	3.30 (0.13)
R ± 0.3 (± 0.012)	2.80 (0.11)	