

BRF-35A系列 Seris

小型大功率继电器
Small high power relay



产品特点

- 35A触点切换能力
35A Contact swiching capability
- 环境温度可达105℃
The ambient temperature can reach 105℃
- 可选1.8mm触点间隙
1.8 mm contact clearance
- 防焊剂封装
Solder proof package

触点负载 Contact Rating	
触点形式 contact form	1H
触点材料 contact material	银合金 AgSn02
触点负载 Contact load	标准型: 35A 277VAC 灵敏型: 32A 277VAC
最大切换电压 Max. switching Voltage	277VAC
最大切换电流 Max. switching Current	标准型: 35A 灵敏型: 32A
最大切换功率 Max. switching power	标准型: 9695VA 灵敏型: 8864VA
电耐久性 Electrical durability	1×10 ⁴ 次 (NO:32A 277VAC 阻性负载, 常温 1S通9S断)
机械耐久性Mechanical	1×10 ⁵ 次

线圈参数Coil Data	
额定线圈功率 Rated coil power	标准型: 约2.8W; 灵敏型: 约1.67W; 超灵敏型: 约1.2W
保持电压 Holding voltage	30%~80%U _N (环境温度23℃) 40%~50%U _N (环境温度85℃/105℃)

备注: 1. 线圈保持电压为对线圈施加额定电压200ms以后的电压值
2. 继电器线圈不允许长时间施加超过保持电压的上限值
防止继电器过热烧毁
3. 为保证继电器可靠动作, 激励时先给线圈施加100%~120%额定电压, 持续时间为200ms
4. 对于塑封型产品试验时, 应打开外壳上的透气孔
remarks:

- The coil holding voltage is the voltage value after applying the rated voltage to the coil for 200ms
- The relay coil il not allowed to apply more than the upper limit of the holding voltage for a long time to prevent the relay from
- In order to ensure the reliable action of the relay, apply 100%~120% rated voltaeg to the coil for 200ms"
- When experimenting with plastic encapsulated products, the vent holes on the housing should be opened

性能参数Performance Parameter		
绝缘电阻Contact Resistance		1000MΩ (500VDC)
吸合时间 (额定电压下) Operate Time		≤15ms
释放时间 (额定电压下) Release Time		≤10ms
介质耐压 Dielectric Strength	断开的触点间BOC	灵敏型1.2W: 1500VAC 1min 超灵敏型1.67W: 1500VAC 1min 标准型2.8W: 2000VAC 1min
	触点与线圈间BCC	2800VAC 1min
接触电阻 (1) Initial contact resistance		≤100mΩ (1A 6VDC)
湿度 humidity		5%~85%RH
温度范围Temperature Range		-40℃~105℃ (不结冰)
冲击Shock	稳定性 Error Operation	98m/s ²
	强度Endurance	980m/s ²
振动vibration		10Hz~55Hz 1.5mm双振幅
引出端形式outlet form		印制板式 printed board
重量Weight		约13克 gabout13g
封装方式 Type of Sealing		防焊剂型 The flux type

备注: 1.上述值为初始值
remarks: 1.The above values are initial values

安规认证 Safety certification	
CQC CQC14002115281 UL E356168	35A 277VAC Making 16A Carrying 35A Breaking 16A 277VAC

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线圈参数Coil Specification (at 23 °C)

超灵敏型: Ultra Sensitive type

线圈功耗 Coil Power	额定电压 Nominal Voltage (VDC)	吸合电压 ⁽¹⁾ Pull-In Voltage (VDC)	释放电压 ⁽¹⁾ Drop-Out Voltage (VDC)	最大电压 ⁽²⁾ Maximum Voltage (VDC)	线圈电阻 Coil Resistance Ω
约1.2W	12	≤9.6	≥0.6	13.2	120×(1±10%)
	24	≤19.2	≥1.2	26.4	480×(1±10%)
	48	≤38.4	≥2.4	52.8	1920×(1±10%)

灵敏型: Sensitive type

线圈功耗 Coil Power	额定电压 Nominal Voltage (VDC)	吸合电压 ⁽¹⁾ Pull-In Voltage (VDC)	释放电压 ⁽¹⁾ Drop-Out Voltage (VDC)	最大电压 ⁽²⁾ Maximum Voltage (VDC)	线圈电阻 Coil Resistance Ω
约1.67W	12	≤9.6	≥0.6	13.2	86×(1±10%)
	24	≤19.2	≥1.2	26.4	345×(1±10%)
	48	≤38.4	≥2.4	52.8	1380×(1±10%)

标准型: Standard type

线圈功耗 Coil Power	额定电压 Nominal Voltage (VDC)	吸合电压 ⁽¹⁾ Pull-In Voltage (VDC)	释放电压 ⁽¹⁾ Drop-Out Voltage (VDC)	最大电压 ⁽²⁾ Maximum Voltage (VDC)	线圈电阻 Coil Resistance Ω
约2.8W	12	≤9.6	≥0.6	13.2	51×(1±10%)
	24	≤19.2	≥1.2	26.4	206×(1±10%)
	48	≤38.4	≥2.4	52.8	823×(1±10%)

备注: 1. 上述值为初始值remarks:The above values are initial values

2. 最大电压是指继电器线圈在短时间内能够承受的最大值

The maximum voltage refers to the maximum value that the relay coil can withstand in a short time

订货标记Ordering Information

BRF - SS - 1 12 D M F G

负载类型: G:高负载
Load type: G:High load

绝缘等级: F:F 级
Insulation grade: F:Class F

触点形式: M:常开型
Contact form: M: NO

线圈功耗:D:标准直流线圈
L:高灵敏度直流线圈 H:超灵敏度直流线圈
Coil power: D: Standard DC coil
L:High sensitivity DC coil H:Ultra sensitive DC coil

线圈电压: 12:12V, 24:24V, 48:48V
Coil voltage: 12:12V, 24:24V, 48:48V

触点组数:1:1 组
Number of pole:1:1-One pole

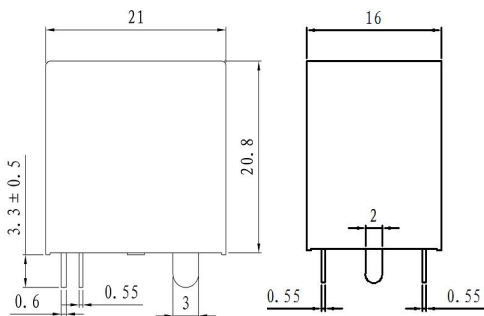
密封方式: SS:防焊剂型
Type of sealing: SS:The flux type

品名:BRF
Model: BRF

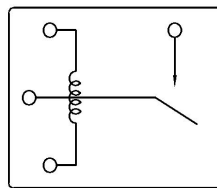
外形尺寸、接线、安装孔位图

Overall dimension, wiring and installation hole bitmap

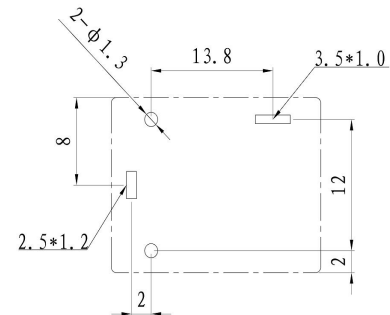
外形尺寸
Outline Dimensions



接线图(底视图)
Wiring Diagram
(Bottom view)



安装孔位图(底视图)
PCB Layout (Bottom view)



备注:

1. 产品外形图的引脚标注尺寸为沾锡前尺寸（沾锡后会变大），安装孔尺寸为推荐的PCB板孔的设计尺寸，具体PCB板孔设计尺寸可根据产品实物进行测绘、调整。
2. 产品部分外形尺寸未注尺寸公差，当外形尺寸 $\leq 1\text{mm}$ ，公差为 $\pm 0.2\text{mm}$ ；当外形尺寸在 $(1\sim 5)\text{mm}$ 之间时，公差为 $\pm 0.3\text{mm}$ ；当外形尺寸 $> 5\text{mm}$ ，公差为 $\pm 0.4\text{mm}$
3. 安装孔尺寸中未注尺寸公差为 $\pm 0.1\text{mm}$

DISCLAIMER:

1. The pin dimension in the outline drawing or the product is the dimension before dipping tin (it gets bigger when stained with tin). The size of mounting hole is the recommended design size of PCB hole. The specific PCB hole design size can be mapped and adjusted according to the actual product.
2. The overall dimension of the product if not marked with dimensional tolerance, when the overall dimension $\leq 1\text{mm}$, Tolerance is $\pm 0.2\text{mm}$. When the overall dimension is $(1\sim 5)\text{mm}$, Tolerance is $\pm 0.3\text{mm}$. When the overall dimension $> 5\text{mm}$, Tolerance is $\pm 0.4\text{mm}$.
3. The dimension tolerance of mounting hole without dimension injection is $\pm 0.1\text{mm}$.

备注:

具体参数型号和产品性能以我司承认书为准，本产品规格书仅作参考，若有更改，恕不另行通知。

对科信而言，不可能评定继电器在每个具体应用领域的所有性能参数要求，因而客户应该根据具体的使用条件，选择与之相匹配的产品。若有疑问，请与科信联系 以便获取更多的技术支持。但产品选型责任仅由客户负责。

DISCLAIMER:

The specific parameters, models, and product performance shall be subject to our company's acceptance letter. This product specification sheet is for reference only and is subject to change without prior notice.

For AFE, it is not possible to assess all performance requirements for relays in each specific application area and therefore the customer should select a suitable product for each specific application, please contact AFE for additional technical support. But the responsibility of product selection is only the responsibility of the customer.