美硕 MEISHUO **MPDN** 超小型中功率继电器 SUBMINIATURE INTERMEDIATE POWER RELAY

特 性 FEATURES

10A 触点切换能力	10A Switching capability
具有一组常开、一组转换触点形式	1 Form A and 1 Form C configurations
标准印制板引出脚	Standard PCB layout
塑封型和防焊剂型可供选择	Sealed and flux proofed types available
外形尺寸 20.30×10.2×15.3mm	Outline dimensions18.4×10.2×15.3mm

触点参数 CONTACT PARAMETERS

触点形式 Contact Arrangement	1A、1B、 1C	
触点材料 Contact Material	银合金 Silver Alloy	
接触电阻 Contact Resistance(初始 Initial)	≤100mΩ（1A 6VDC）	
最大切换电流 Max. Switching Current	标准型 Standard Type	NO: 5A/10A(阻性 Resistive) NC: 3A/5A (阻性 Resistive)
	灵敏型 Sensitive Type	NO:5A(阻性 Resistive) NC: 3A(阻性 Resistive)
最大切换电压 Max. Switching Voltage	277VAC/30VDC	
最大切换功率 Max. Switching Power	2770/300W	750VA/90W
电气寿命 Electrical Life	1×10^5 次 OPS	
机械寿命 Mechanical Life	1×10^6 次 OPS	

性能参数 CHARACTERISTICS

绝缘电阻 Insulation Resistance	1000MΩ（500VDC）
介质耐压 Dielectric Strength	触点与线圈间 Between Coil & Contacts: 4000VAC 1min
	断开触点间 Between Open Contacts: 1000VAC 1min
动作时间 Operate Time	≤8ms
释放时间 Release Time	≤5ms
环境温度 Ambient Temperature	-40℃~+105℃
振动 Vibration Resistance	10Hz~55Hz 1.5mm 双振幅(DA)
冲击 Shock Resistance	稳定性 Functional: 98m/s²(10G)
	强 度 Destructive: 980m/s²(100G)
引出端方式 Terminal Form	印制板式 PCB
封装形式 Construction	塑封型 Sealed，防焊剂型 Flux Proofed
重量 Unit Weight	约 Approx. 7g

线圈规格表 COIL DATA(23℃)

标准型 Standard Type					
额定电压 Rated Voltage VDC	动作电压 Operate Voltage VDC	释放电压 Release Voltage VDC	最大允许电压 Max Allowable Voltage VDC	线圈电阻 Coil Resistance Ω±10%	线圈功耗 Coil Power W
5	≤3.75	≥0.25	7.5	62.5	约 Approx 0.4
6	≤4.5	≥0.3	9	90	
9	≤6.75	≥0.45	13.5	202.5	
12	≤9	≥0.6	18	360	
18	≤13.5	≥0.9	27	810	
24	≤18	≥1.2	36	1440	
48	≤36	≥2.4	72	5760	

标准型 Standard Type					
额定电压 Rated Voltage VDC	动作电压 Operate Voltage VDC	释放电压 Release Voltage VDC	最大允许电压 Max Allowable Voltage VDC	线圈电阻 Coil Resistance Ω±10%	线圈功耗 Coil Power W
5	≤3.75	≥0.25	7.5	56	约 Approx 0.45
6	≤4.5	≥0.3	9	80	
9	≤6.75	≥0.45	13.5	180	
12	≤9	≥0.6	18	320	
18	≤13.5	≥0.9	27	720	
24	≤18	≥1.2	36	1280	
48	≤36	≥2.4	72	5120	

灵敏型 Sensitive Type					
额定电压 Rated Voltage VDC	动作电压 Operate Voltage VDC	释放电压 Release Voltage VDC	最大允许电压 Max Allowable Voltage VDC	线圈电阻 Coil Resistance Ω±10%	线圈功耗 Coil Power W
5	≤3.75	≥0.25	7.5	125	约 Approx 0.2
6	≤4.5	≥0.3	9	180	
9	≤6.75	≥0.45	13.5	405	
12	≤9	≥0.6	18	720	
18	≤13.5	≥0.9	27	1620	
24	≤18	≥1.2	36	2800	
48	≤36	≥2.4	72	11520	

安全认证 APPROVALS

安全认证 Approvals	UL	TUV	CQC
证书编号 Certificate Number	E358149	R50403369	18002195922
负载 Rating	A型(100k 105℃): 10A 277VAC/250VAC/125VAC 5A277VAC/250VAC/30VDC 8A/250VAC 3A 250VAC/30VDC TV-5 120VAC 1/6HP 277VAC C型（100k 105℃): NO: 10A 277VAC/250VAC/125VAC 5A 277VAC/250VAC/30VDC TV-5 120VAC 1/6HP 277VAC 1A 250VAC 3A 250VAC/30VDC 8A/250VAC NC: 3A 250VAC/30VDC 5A /277VAC /250VAC/30VDC 1A 250VAC	A型(100k 105℃): 10A 250VAC 8A 250VAC 5A /250VAC/30VDC 3A 250VAC/30VDC C型（100k 105℃): NO:10A250VAC 8A 250VAC 5A 250VAC/30VDC 3A 250VAC/30VDC NC:3A250VAC/30VDC 5A 250VAC/30VDC 1A 250VAC	NO:10A/277VAC/250VAC/125VAC 8A/277VAC/250VAC 5A/277VAC/250VAC/30VDC 3A/277VAC/250VAC/30VDC NC:3A/250VAC/30ADC 5A/250VAC/30VDC 1A/250VAC

订货标记示例 ORDERING INFORMATION

	MPDN	-S	-1	12	-A	F
产品型号 Model:	MPDN					
产品结构 Structure:	S：塑封型 Sealed 防焊剂型 Flux Proofed					
触点组数 Contact Group:	1 : 1 组 1 Group					
线圈电压 Coil Voltage:	3、5、6、9、12、18、24、48 VDC					
触点形式 Contact Form:	A: 常开 NO B:常闭 NC C: 转换 NO/NC					
绝缘等级 Insulation Class	无: 标准型，B 级 Nil: Standard type, Class B	F: F 级 F: Class F				

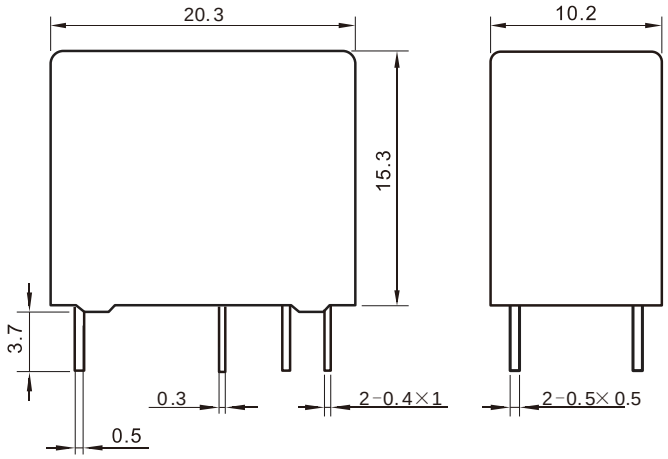
外形尺寸、接线图、安装孔尺寸 OUTLINE DIMENSIONS, WIRING DIAGRAM AND PCB LAYOUT

(单位 Unit: mm)

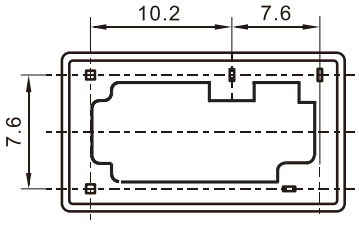
一组转换

1 Form C

外形尺寸 Outline Dimensions



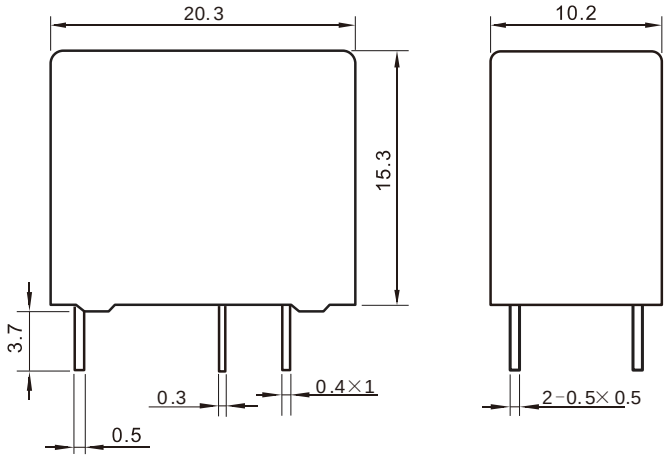
底视 Bottom View



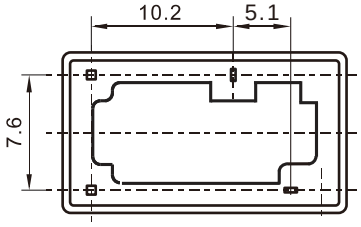
一组常闭

1 Form B

外形尺寸 Outline Dimensions



底视 Bottom View

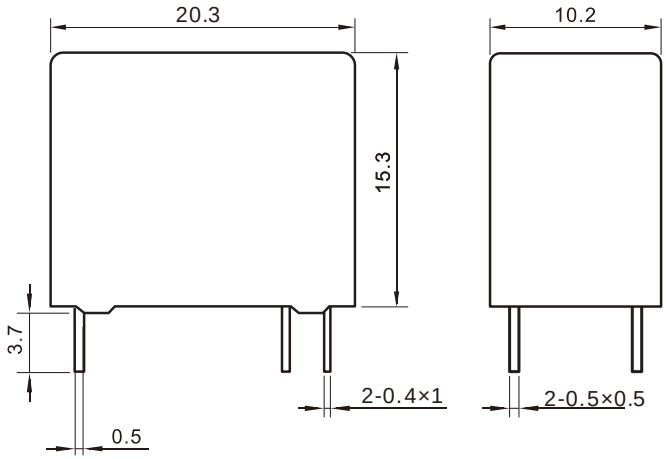


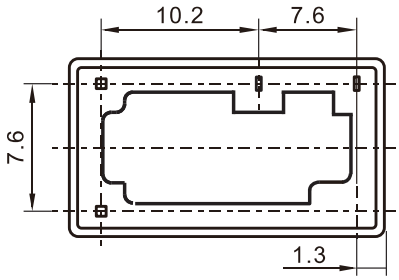
外形尺寸 Outline Dimensions

底视 Bottom View

一组常开

1FormA

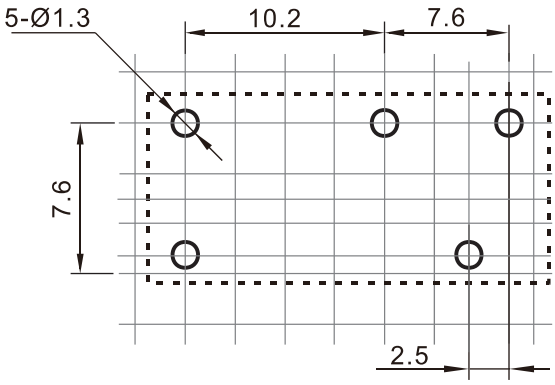


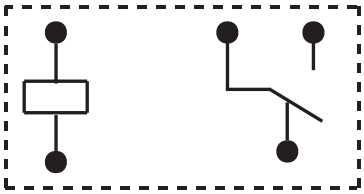


安装孔尺寸 PCB Layout

接线图 Wiring Diagram

1 Form C

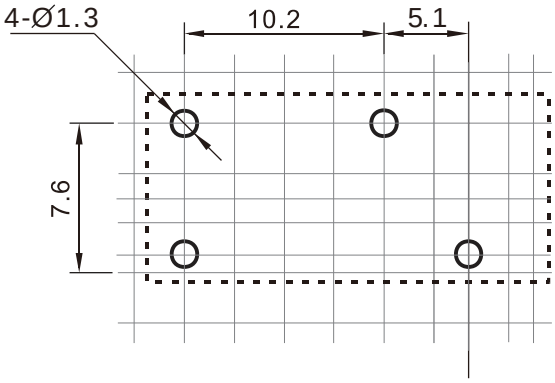


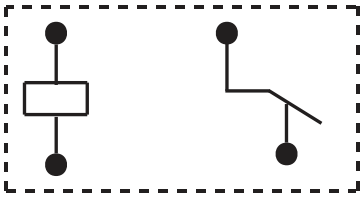


安装孔尺寸 PCB Layout

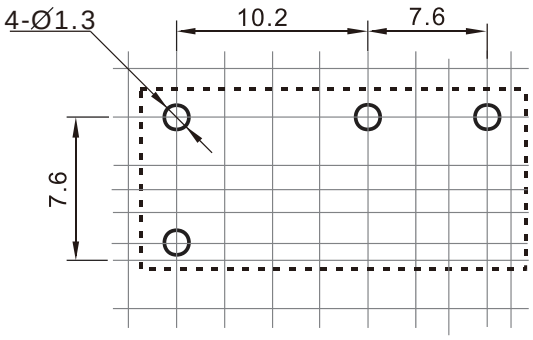
接线图 Wiring Diagram

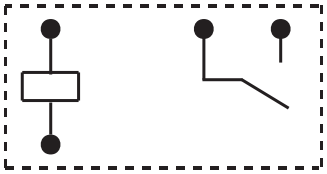
1 Form B





1 Form A





备注：(1) 产品部分外形尺寸未注尺寸公差，当外形尺寸≤1mm，公差为±0.2mm；当外形尺寸在 1~5mm 之间时，公差为±0.3mm；当外形尺寸 > 5mm 时，公差为±0.4mm；

（2）安装孔尺寸中未注尺寸公差的均为±0.1mm。

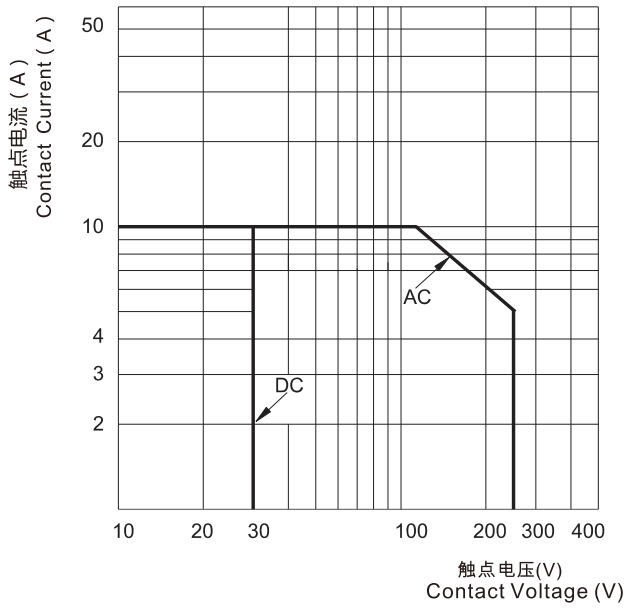
REMARK:

1) In case of no tolerance shown in outline dimension: outline dimension ≤1mm, tolerance should be ±0.2mm; outline dimension > 1mm and ≤5mm, tolerance should be ±0.3mm; outline dimension > 5mm, tolerance should be ±0.4mm;
2) The tolerance without indicating for PCB layout is always ±0.1mm.

性能曲线图 PERFORMANCE CURVE

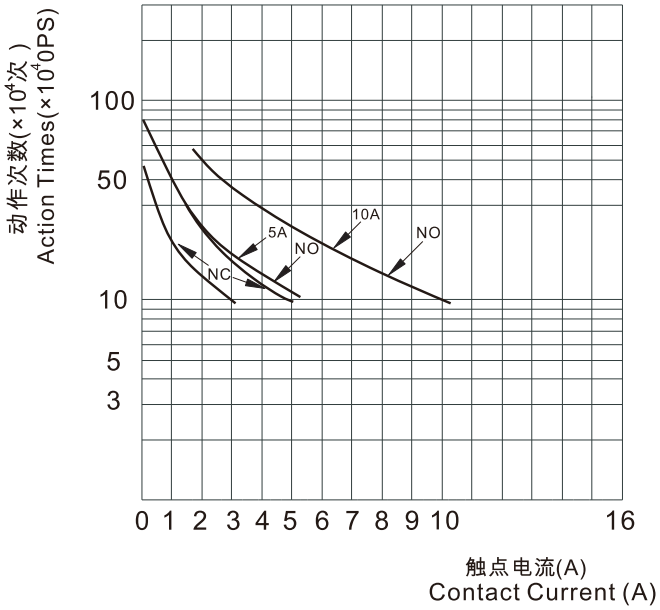
最大切换功率

Maximum Switching Power



电耐久性曲线

Electrical Endurance Curve



声明:

本产品规格书仅供客户使用时参考，若有更改，恕不另行通知。(数据取自标准环境温度 20℃下)

对美硕而言，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，请与美硕联系获取更多的技术支持。但产品选型责任仅由客户负责。

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This product specification for client's reference, if any change without notice.

For Meishuo, can not require evaluation of relays in each specific application of all the performance parameters, so customers should be selected according to the matching conditions for the use of specific products, if you have any questions, please contact us and get more technical support. However, product selection responsibility only by the customer.

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