

YSM2/24D10P22模块——10A 700V SSR module

概述 Features

- 2合1继电器模块 2 in 1 SSR module
- 调相型 Non zero-cross
- 负载电流至10A Load current up to 10A
- 阻断电压700V Repetitive peak off-state voltage 700V
- 介质耐压2500V Dielectric strength 2500V
- 带工作状态显示 Operating display
- 带导轨快连接安装 Rail fast mount

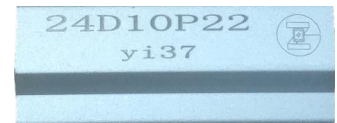
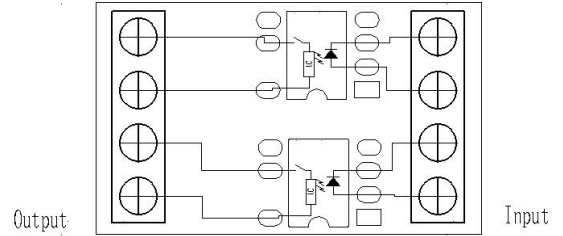


应用 Applications

- 工业控制 Industrial control

打印标志 Marking information

Part number	Package	Marking
YSM2/24D10P22	导轨快速安装	24D10P22



极限值 Absolute maximum ratings (单个SSR)

(Ta=25℃)

特性参数/Parameter		符号/Symbol	测试条件/Test condition	最小值/Min.	典型值/Typ.	最大值/Max.	单位/Unit
输入端/Input	工作电压/Operating voltage	V_{in}		19	24	28.8	V
输出端/Output	阻断电压/Repetitive peak off-state voltage	V_{DRM} / V_{RRM}		700			V
	额定电流/On-state RMS current	$I_{T(RMS)}$	$V_{in}=24V$			10	A
	浪涌电流/Surge current	I_{TSM}	50Hz, 1 cycle		50		A
介质耐压/I/O Dielectric strength *		V_{ISO}	$I_{ISO} \leq 0.3mA$	2500			V_{rms}
工作温度/Operating temperature		T_{opr}		-30		85	℃
储存温度/Storage temperature		T_{stg}		-40		125	℃

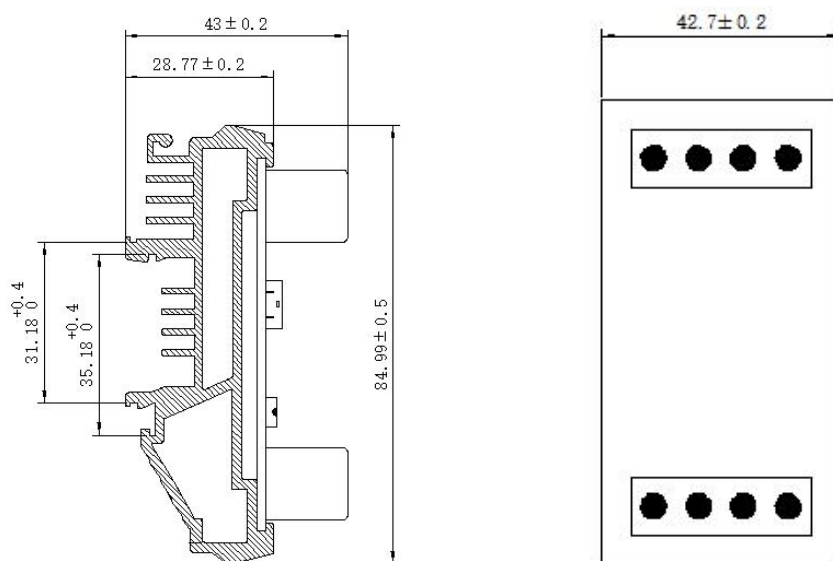
“*”：RH=40 to 60%, T=20~30℃, AC for 1minute.

电参数 Electrical parameters (单个SSR)

(Ta=25°C)

特性参数/Parameter		符号 /Symbol	测试条件 /Test condition	最小 值 /Min.	典型值 /Typ.	最大值 /Max.	单位 /Unit
输入端/Input	输入电流/Input current	I_{in}	$V_{in}=V_{in}+20\%$		14	18	mA
输出端/Output	断态泄漏电流/Output off-state leakage current	I_{DRM}	$V_{DRM} =700V$			10	μA
	断态泄漏电流/Output off-state leakage current	I_{RRM}	$V_{RRM} =700V$			10	μA
耦合特性 /Transfer characteristics	接通电压/Turn on voltage	V_{on}			8	18	V
	关断电压/Must release voltage	V_{off}		1.2			V
	导通电压降/Output on-state voltage drop	V_T	$V_{in}=24V, I_1=2A$		1.2	1.4	V
	导通时间/Turn on time	T_{on}	$V_{in}=24V, I_1=600mA$			1	ms
	关断时间/Turn off time	T_{off}	$V_{in}=24V, I_1=600mA$			1+1/2cycle	ms

外形尺寸 Outline dimension :mm



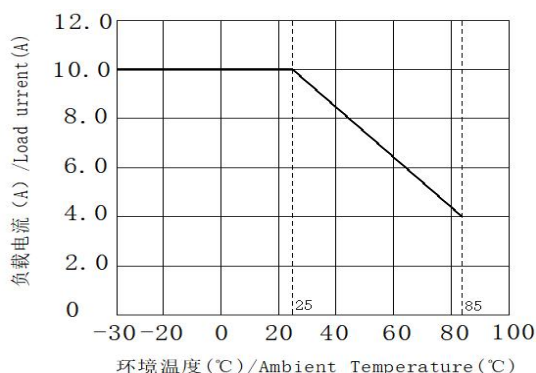
订货信息 Ordering information

订货信息/Ordering information							
	Y	SM	2	24D	10	P	22
公司商标代号 Company symbol							
交流输出型 SSR 模块 Output module		AC SSR					
控制电路数 Number of control circuits: 2: 2组							
输入电压 Input voltage: 24Vdc							
负载电流 Load current: 10-10A							
P:调相型 Non zero-cross							
负载电压 Load voltage : 22-220Vac;38-380Vac							

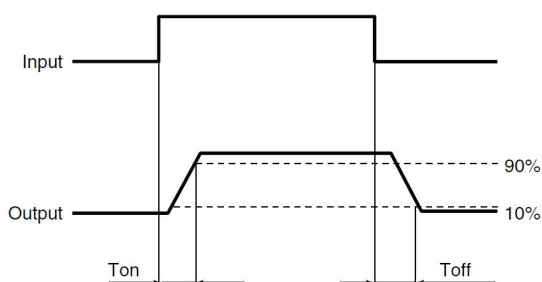
特性曲线 Characteristic data

1. 负载电流与环境温度关系曲线

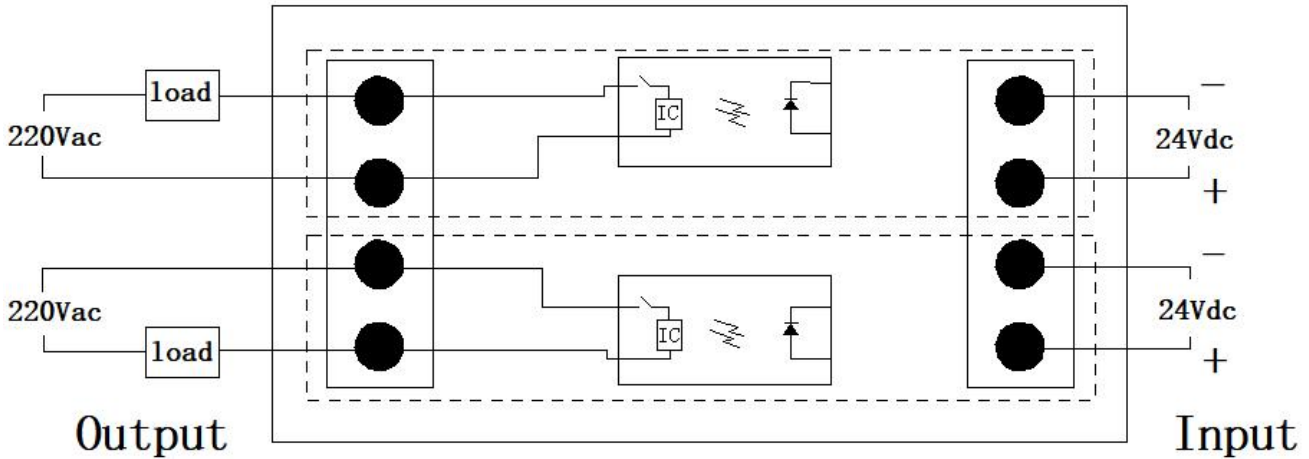
Load current VS. ambient temperature



接通和关断时间关系 Turn on and turn off time



接线图 Wiring diagram



注意事项 Notes

- 工作环境温度超过 25℃ 时请降额使用。参见特性曲线 1。
When ambient temperature is above 25℃, the load current must be reduced. (see characteristic data)
- 继电器接线时, 务必保证输入端极性的正确, 以免损坏继电器。
Ensuring the polarity is correct when connecting the input lines, otherwise the wrong connection will damage the relay.

关于防静电对策 Cautions for static electricity

- 操作 MOS 输出继电器的作业人员, 请穿戴防静电工作服, 通过 500kΩ~1MΩ 左右的保护电阻, 实施人体接地。
a. Employees handling relays should wear anti-static clothes and should be grounded through protective resistance of 500kΩ to 1MΩ.
- 请在作业台上装有带导电性的金属板或具有防静电的专用板, 并对测量仪器和治具等实施接地。
b. A conductive metal sheet should be placed over the work table. Measuring instruments and jigs should be grounded.
- 组装时使用的设备等也应正确的接地。
c. Devices and equipment used in assembly should also be grounded.
- 对印刷电路板和机器进行包装时, 请避免使用发泡苯乙烯、聚乙烯等带电性的高分子材料。
d. When packing printed circuit boards and equipment, avoid using high-polymer materials such as foam styrene, plastic, and other materials which carry an electrostatic charge.
- 对 MOS 输出继电器进行储存和搬运时, 请在不易产生静电的环境(例如湿度 45~60%) 中通过导电性包装材料进行保护。
e. When storing or transporting relays, the environment should not be conducive to generating static electricity (for instance, the humidity should be between 45 and 60%), and relays should be protected using conductive packing materials.