

TH-YAS2/24D2Z22——Ultra-thin SSR module

概述 Features

- 厚度6.2mm SSR Thickness 6.2mm SSR
- 过零型 Zero-cross
- 负载电流至2A Load current up to 2A
- 阻断电压700V Repetitive peak off-state voltage 700V
- 介质耐压3000V Dielectric strength 3000V
- 带工作状态显示 Operating display
- 带导轨快连接安装 Rail fast mount
- 符合RoHS RoHS compliant



应用 Applications

- 工业控制 Industrial control

打印标志 Marking information

Part number	Package	Marking
TH-YAS2/24D2Z22	导轨快速安装	TH-YAS2 24D2Z22

极限值 Absolute maximum ratings

(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	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_{RSM}		700			V
	额定电流/On-state RMS current	$I_{T(RMS)}$	$V_{in}=24V$			2	A
	浪涌电流/Surge current	I_{TSM}	50Hz, 1 cycle		30		A
介质耐压/I/O Dielectric strength *		V_{ISO}	$I_{ISO} \leq 0.3mA$	3000			V_{rms}
工作温度/Operating temperature		T_{opr}		-30		85	°C
储存温度/Storage temperature		T_{stg}		-40		125	°C

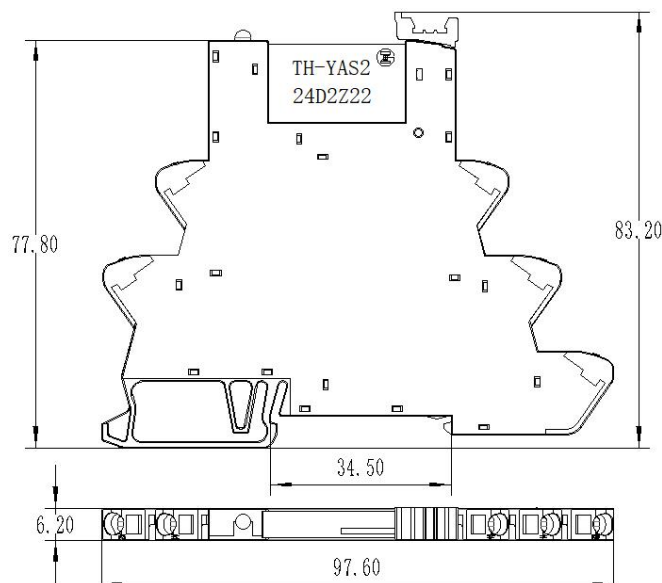
“*”：RH=40 to 60%, T=20~30°C, AC for 1minute.

电参数 Electrical parameters

(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	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
	负载电压/Load voltage	V_{ac}		24		264	V
	电压指数上升率 /Critical rate of rise of off-state voltage	dv/dt	$V_{DRM}=600V*1/\sqrt{2}$	200			V/ μs
	最小负载电流/Min. load current	I		100			mA
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_r	$I_{in}=10mA, I_L=2A$ $V_b=6V$		1.2	1.5	V
	过零电压/Zero-cross voltage	V_{zc}	$I_{in}=10mA, I_L=2A$		10	20	V
	导通时间/Turn on time	T_{on}	$I_{in}=10mA,$ $V_b=6V, R_L=100\Omega$			1+1/2cycle	ms
	关断时间/Turn off time	T_{off}				1+1/2cycle	ms

外形尺寸 Outline dimension :mm



未注公差为: $\pm 0.2\text{mm}$

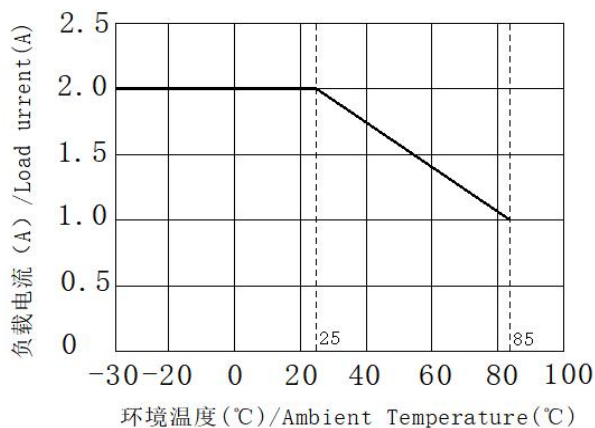
订货信息 Ordering information

订货信息/Ordering information								
	TH	Y	AS	2	24D	2	Z	22
超薄型模块 Ultra-thin module								
公司商标代号 Company symbol								
交流输出型 AC SSR								
封装 Package: 2: SIP4								
输入端电压型 Voltage driving: 24D-24Vdc								
负载电流 Load current: 2A								
P:调相型 Non zero-cross Z:过零型 Zero-cross								
负载电压 Load voltage: 220Vac								

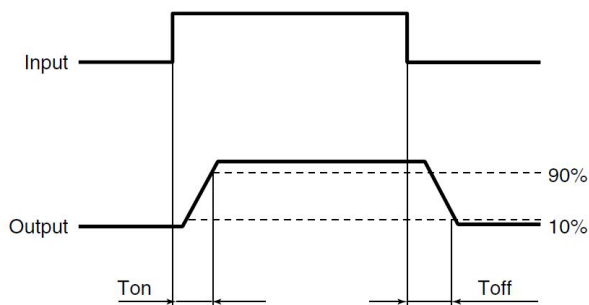
特性曲线 Characteristic data

1. 负载电流与环境温度关系曲线

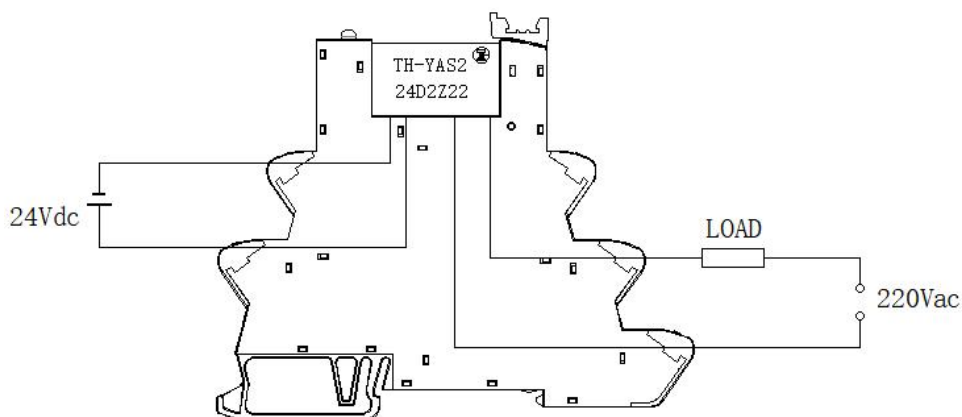
Load current VS. ambient temperature



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

a 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)

b 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.

c 组装时使用的设备等也应正确的接地。

Devices and equipment used in assembly should also be grounded.

d 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。

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.

e 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。

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.