

TH-YES2/24D10A60V——Ultra-thin Opto-MOS module

概述 Features

- 厚度6.2mm SSR Thickness 6.2mm SSR
- 负载电流至10A Load current up to 10A
- 击穿电压60V Breakdown voltage 60V
- 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

- 交通信号控制 Traffic signals control
- 测试设备 Measuring instruments
- 工业控制 Industrial control



打印标志 Marking information

Part number	Package	Marking
TH-YES2/24D10A60V	导轨快速安装	TH-YES2 24D10A60V

极限值 Absolute maximum ratings

(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	击穿电压/ Breakdown voltage	BV_{DSS}		60			V
	功耗/Power dissipation	P_{out}			2	2.5	W
	额定电流/On-state current	I_L	$V_{in}=24V$			10	A
	峰值电流/Peak current	I_{peak}	100 ms (1shot), VL = DC		40		A
介质耐压/Dielectric strength *		V_{iso}	$I_{iso} \leq 0.3mA$	3000			V_{rms}
工作温度/Operating temperature		T_{opr}		-30		85	℃
储存温度/Storage temperature		T_{stg}		-40		125	℃

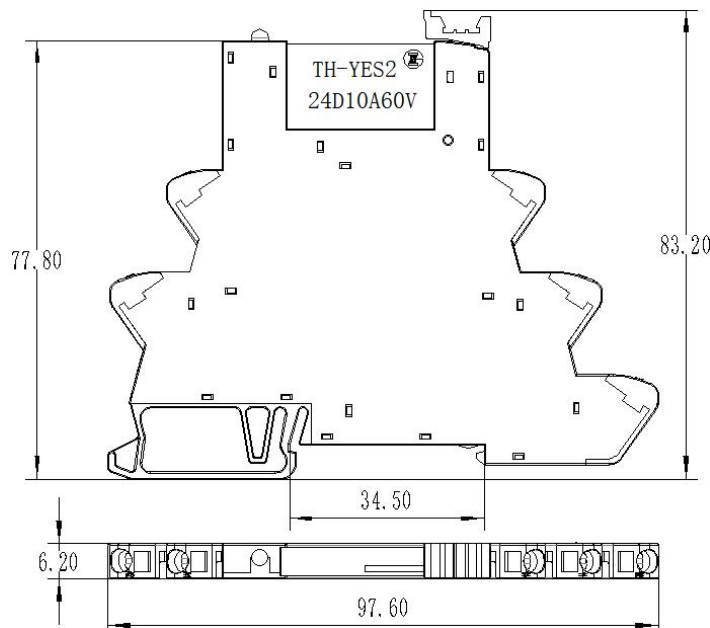
“*”：RH=40 to 60%, T=20~30℃, AC for 1minute.

电参数 Electrical parameters

(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_{Leak}	$V_o=60V$			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
	导通电阻/Output on-state resistance	R_{on}	$I_{in}=10mA, I_o=10A$		10	20	m Ω
	导通时间/Turn on time	T_{on}	$I_{in}=10mA, I_o=2A$			5	ms
	关断时间/Turn off time	T_{off}	$I_{in}=10mA, I_o=2A$			2	ms
	电容/I/O capacitance	C					3

外形尺寸 Outline dimension :mm



未标注公差为±0.2mm

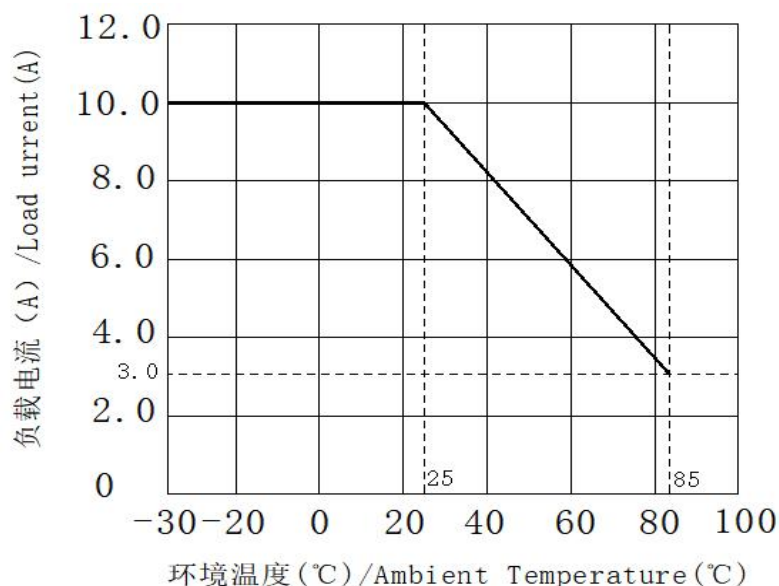
订货信息 Ordering information

订货信息/Ordering information							
	TH	Y	ES	2	24D	10A	60V
超薄型模块 Ultra-thin module							
公司商标代号 Company symbol							
直流 MOS 输出 SSR:MOS DC Output SSR							
封装 Package: 2: SIP4							
输入端电压型 Voltage driving: 24D-24Vdc							
负载电流 Load current: 10A							
击穿电压 BV_{DSS} : 60V							

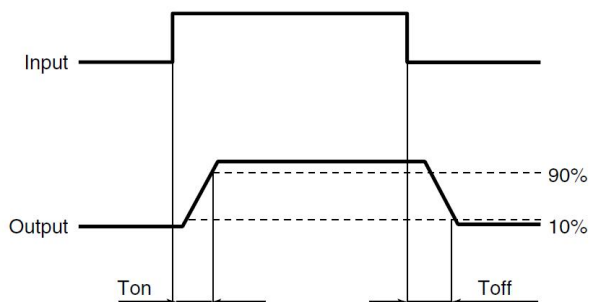
特性曲线 Characteristic data

1. 负载电流与环境温度关系曲线

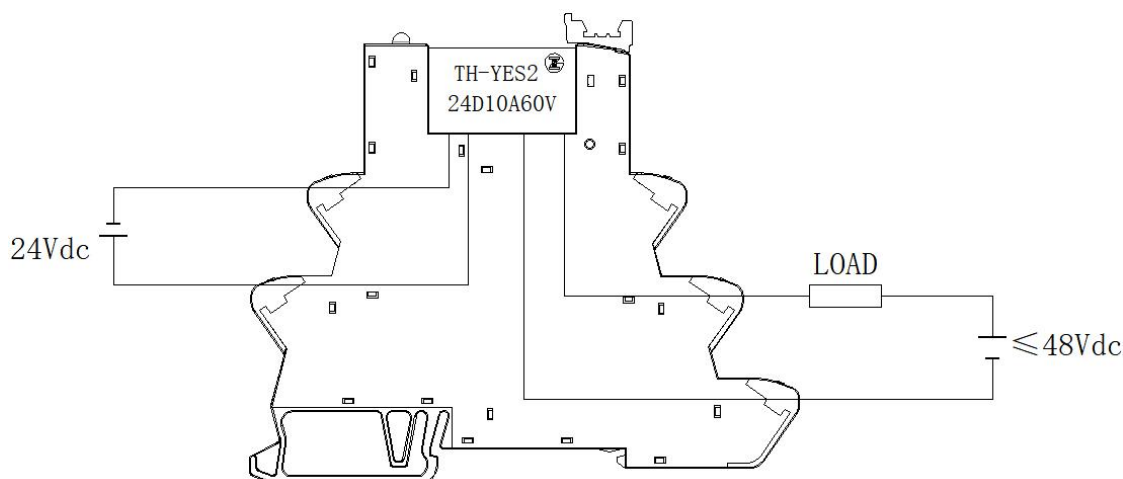
Load current VS. ambient temperature



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 500k Ω ~1M Ω 左右的保护电阻，实施人体接地。Employees handling relays should wear anti-static clothes and should be grounded through protective resistance of 500k Ω to 1M Ω .

-
- b. 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。A conductive metal sheet should be placed over the work table. Measuring instruments and jigs should be grounded.
- 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.