TH-YDS2/24D4006——Ultra-thin Opto-MOS module

概述 Features

- 厚度6.2mm SSR　Thickness 6.2mm SSR
- 负载电流至4A　Load current up to 4A
- 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-YDS2/24D4006	导轨快速安装	TH-YDS2 24D4006

极限值 Absolute maximum ratings

(Ta=25℃)

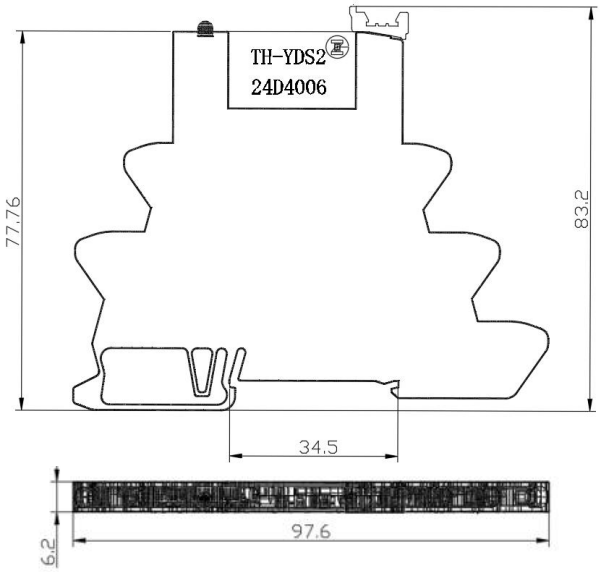
特性参数/Parameter		符号/Symbol	测试条件/Test condition	最小值/Min.	典型值/Typ.	最大值/Max.	单位/Unit
输入端/Input	工作电压/Operating voltage	V_{in}		19	24	28.8	V
输出端/Output	击穿电压/ Breakdown voltage	BV_{DSS}		60			V
	功耗/Power dissipation	p_{out}			2	2.5	W
	额定电流/On-state current	I_L	V_{in}=24V			4	A
	峰值电流/Peak current	I_{peak}	100 ms (1shot),VL = DC		7		A
介质耐压/Dielectric strength *		V_{ISO}	I_{ISO}≤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

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}	$I_{in}=10mA$, $I_D=1.6A$		45	100	mΩ
	导通时间/Turn on time	T_{on}	$I_{in}=10mA$, $I_D=1.6A$			5	ms
	关断时间/Turn off time	T_{off}	$I_{in}=10mA$, $I_D=1.6A$			2	ms
	电容/I/O capacitance	C				3	pF

外形尺寸 Outline dimension :mm



订货信息 Ordering information

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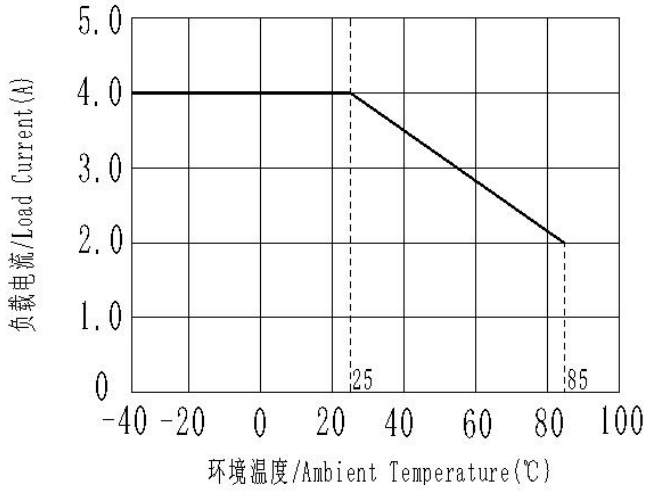
	TH	Y	DS	2	24D	400	6

- 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：400-4A
- 击穿电压 BV_{DSS}：6—60V

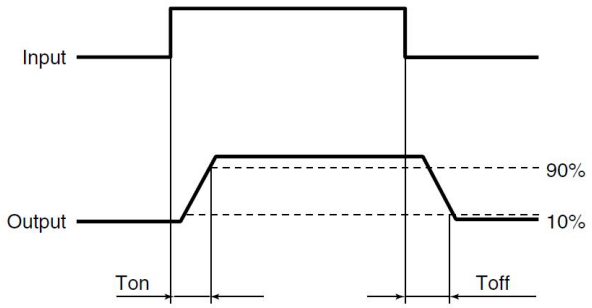
特性曲线 Characteristic data

1. 负载电流与环境温度关系曲线

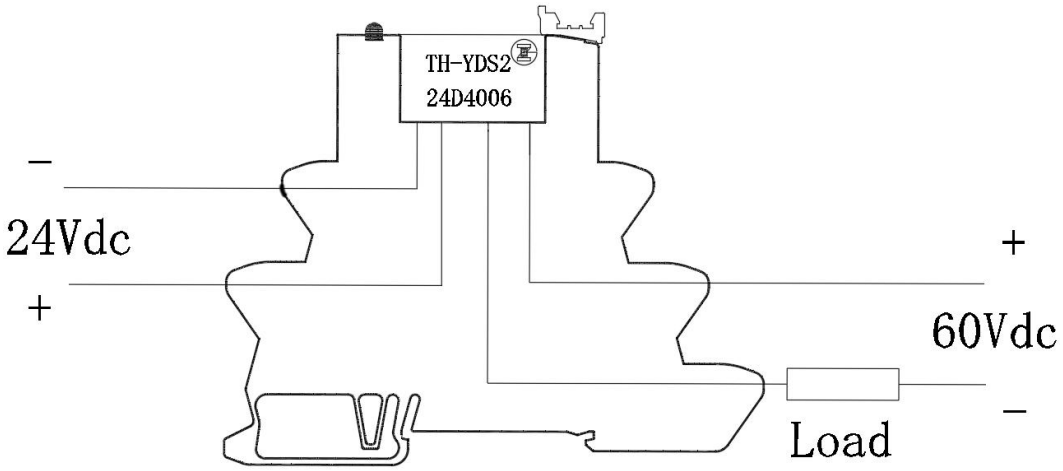
Load current VS. ambient temperature



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

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.

关于防静电对策 Cautions for static electricity

a. 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。Employees handling relays should wear anti-static clothes and should be grounded through protective resistance of 500kΩ to 1MΩ.

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.