

## YOM3050D/S6——300mA 500V Opto-Mos

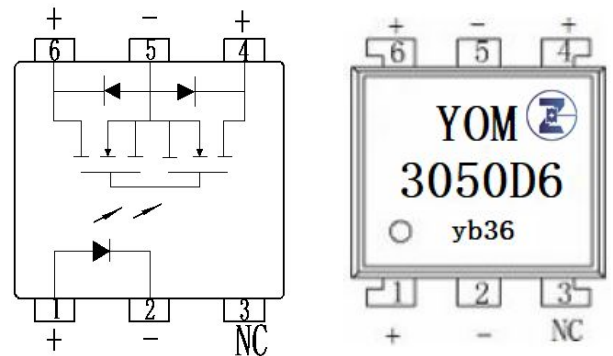
### 概述 Features

- 光电隔离 Optoelectronic isolation
- 负载电流至300mA Load current up to 300mA
- 阻断电压500V Peak off-state voltage 500V
- 介质耐压5000V Dielectric Strength 5000V
- 符合RoHS RoHS compliant



### 应用 Applications

- 高速检测设备 High-speed inspection machines
- 程控交换设备 Telephone equipment
- 计算机 Computer



### 打印标志 Marking Information

Part Number	Package	Marking
YOM3050D6	DIP6	YOM 3050D6
YOM3050S6	SMD6	YOM 3050S6

### 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	正向电压/LED forward voltage	$V_F$	$I_F=10mA$		1.2	1.3	V
	反向电流/ LED reverse current	$I_R$	$V_R=5V$			10	$\mu A$
	功耗/Power dissipation	$P_{in}$			75		mW
输出端/Output	断态泄漏电流/Output off-state leakage current	$I_R$	$V_D=500V$			10	$\mu A$
	功耗/Power dissipation	$P_{out}$			800		mW
	额定连续电流/Continuous rating current	$I$				300	mA
	峰值电流/ Peak current	$I$	A connection: 100ms (1 shot), VL=DC			900	mA

## 电参数 Electrical Parameters

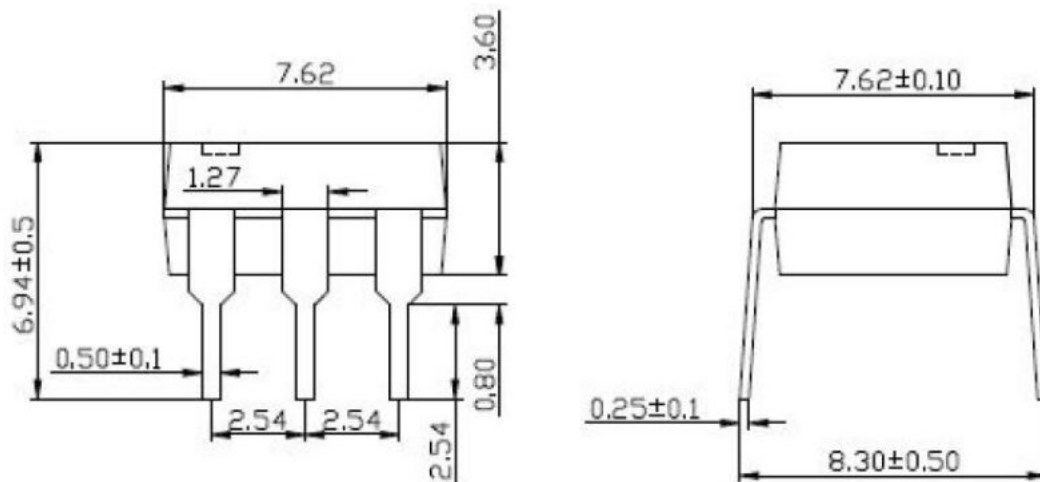
(Ta=25°C)

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
耦合特性 /Transfer characteristics	LED 触发电流 /LED trigger current *	$I_{FT}$		5	8	10	mA
	推荐的工作电流 /Recommend operating current	$I_{IN}$		10		18	mA
	导通电阻 / Output on-state resistance	$R_{ON}$	$I_F=5mA, I_D=400mA$		8	9	$\Omega$
	导通时间 / Turn on time	$t_{On}$	$I_F=5mA, I_D=400mA$			2	ms
	关断时间 / Turn off time	$t_{off}$	$I_F=5mA, I_D=400mA$			1	
	介质耐压 / I/O Dielectric strength *	$V_{ISO}$	$I_{off} \leq 0.3mA$	5000			$V_{rms}$
	电容 / I/O capacitance	$C$			1.5		pF
	工作温度/Operating temperature	$T$		-40		85	°C
	储存温度/Store temperature			-40		125	

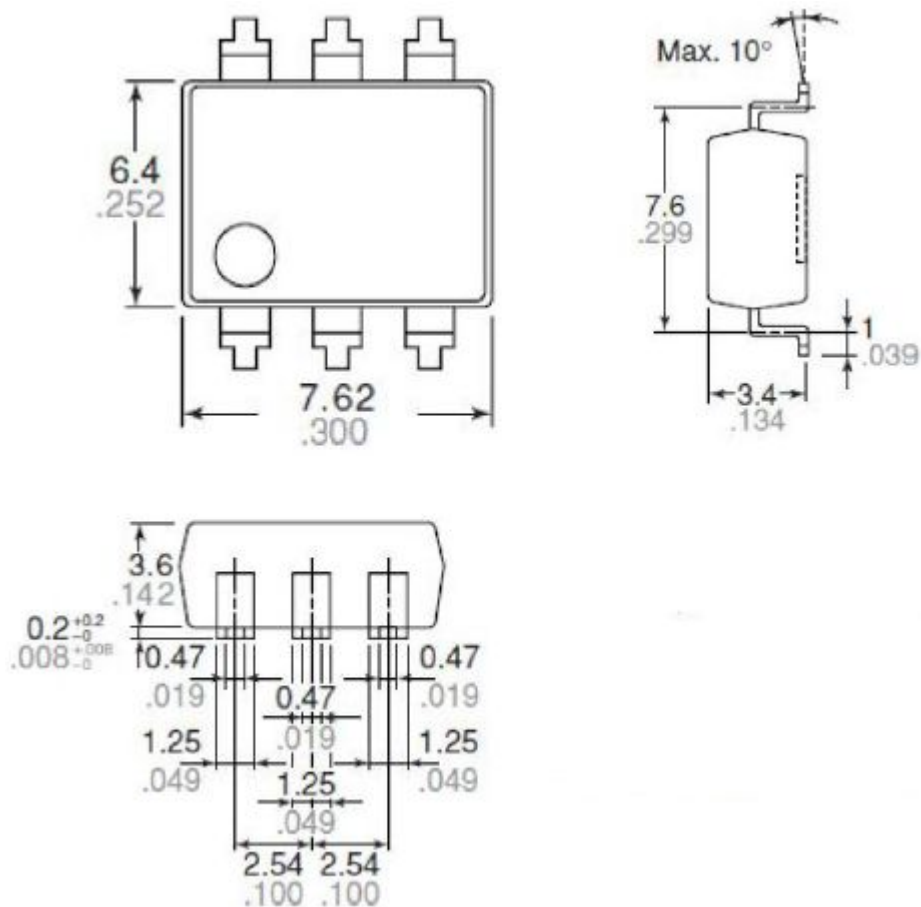
备注：1、介质耐压超过 3000V 建议在油里测试，在测试前请务必确认输入端和输出端已经分别短路。  
2、带“\*”参数为关键参数。

## 外形尺寸 Outline dimension :mm

### 1、DIP6



## 2、SMD6



注1: 未注公差请按±0.2。

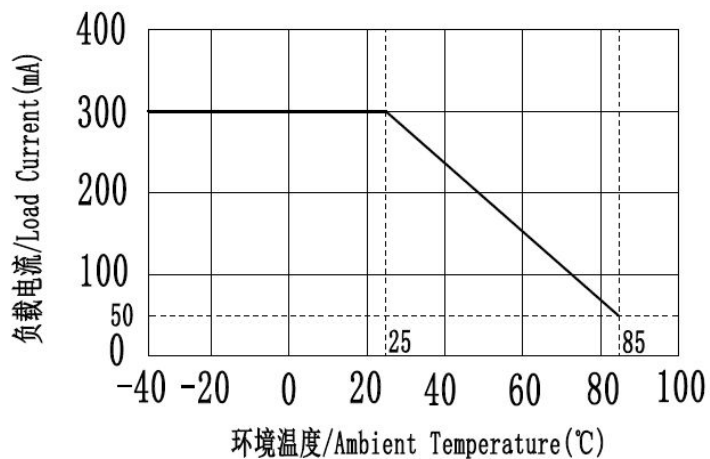
## 订货信息 Ordering Information

订货信息/Ordering Information							
	Y	OM	B/	30	50	D/S	6
公司商标代号 Company symbol							
MOS 输出型 SSR							
常开型 normal open: 默认 nil							
常闭型 normal close: B							
负载电流 Load current: 30-300mA							
击穿电压 BVDSS: 50-500V							
D: DIP		S: SMD					
6: 6PIN							

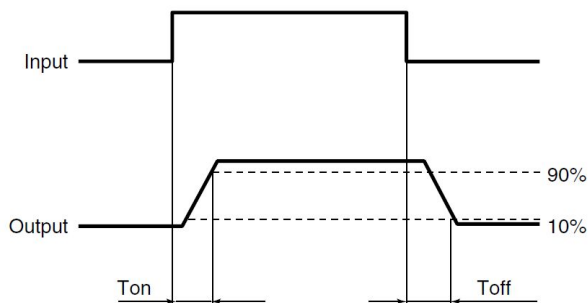
## 特性曲线 Characteristic Data

### 1. 负载电流与环境温度关系曲线

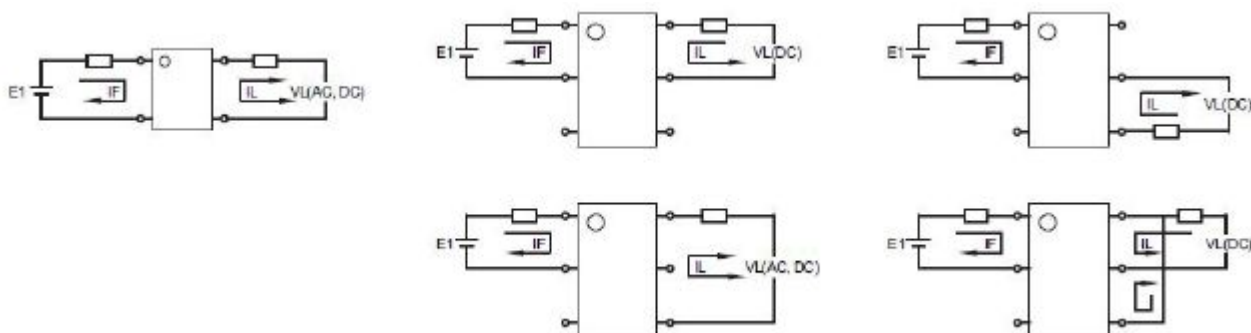
Load current VS. Ambient temperature



## 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，降额曲线参考附件。  
When ambient temperature is above 25℃, the load current must be reduced. (see Characteristic Data 1)
- 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，请穿戴制电性作业服，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 clothing and should be grounded through protective resistance of 500kΩ to 1MΩ.
- b. 请在作业台上粘贴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.
- c. 使用电烙铁时，对电烙铁前端进行接地。(建议使用低电压用的电烙铁。)  
c. When using soldering irons, either use irons with low leakage current, or ground the tip of the soldering iron. (Use of low-voltage soldering irons is also recommended.)
- d. 组装时使用的设备等也应正确地接地。  
d. Devices and equipment used in assembly should also be grounded.
- e. 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。  
e. 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.
- f. 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。  
f. 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.