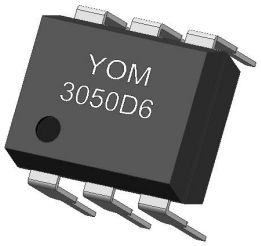
YOM3050D/S6——500V 300mA Opto-MOS

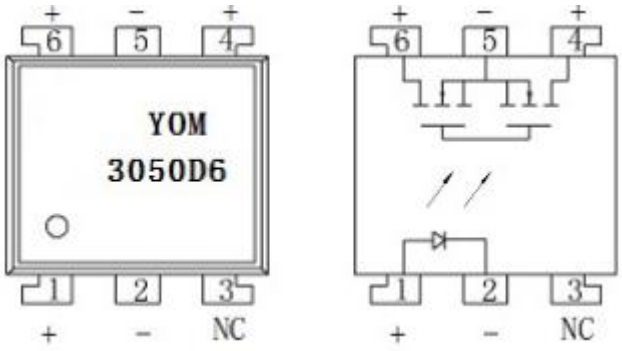
概述/General Features



- 光电隔离/ optoelectronic isolation
- 负载电流最大为300mA/Max load current 300mA
- 高负载耐压500V/High load 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



订货信息/Ordering Information

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

极限值/Absolute Maximum

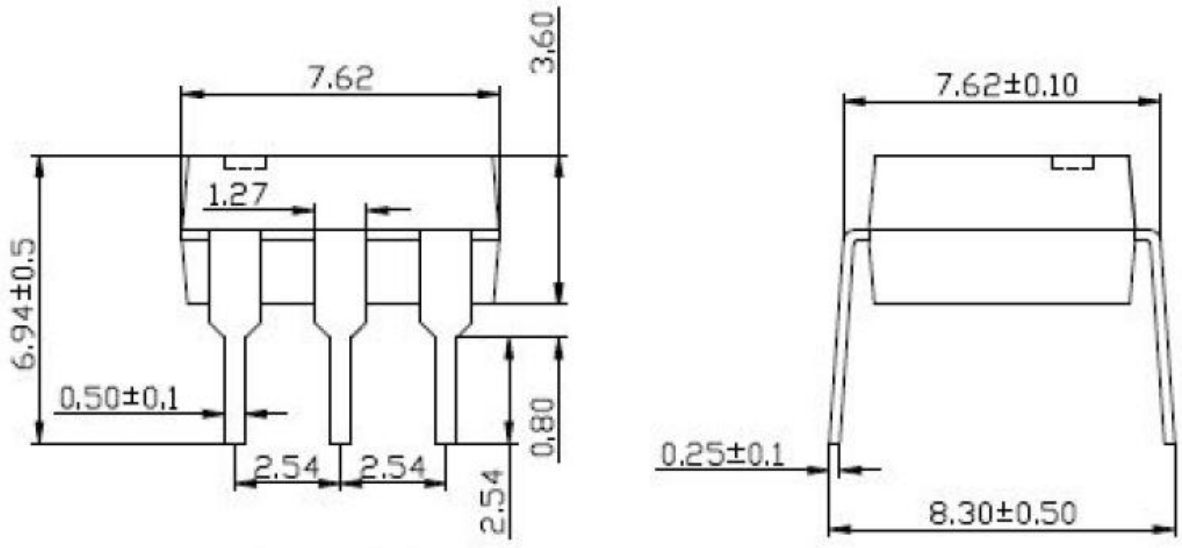
特性参数/Parameter		符号/Symbol	测试条件/Test condition	最小值/Min.	典型值/Typ.	最大值/Max.	单位/Unit
输入端/Input	正向电压/LED forward current	V_F	I_F=10mA		1.2	1.3	V
	反向电流/LED reverse voltage	I_R	V_R=5V			1	μA
	功耗/Power dissipation	p_{in}			75		mW
输出端/Output	断态泄漏电流/Output off-state laekage current	I_R	V_D=500V			100	nA
	功耗/Power dissipation	p_{out}			800		mW
	额定连续电流/ Continuous rating current	I				300	mA
	浪涌电流/Peak current	I	A connection: 100 ms (1 shot),V_L = DC		900		mA

电参数/Electrical parameter

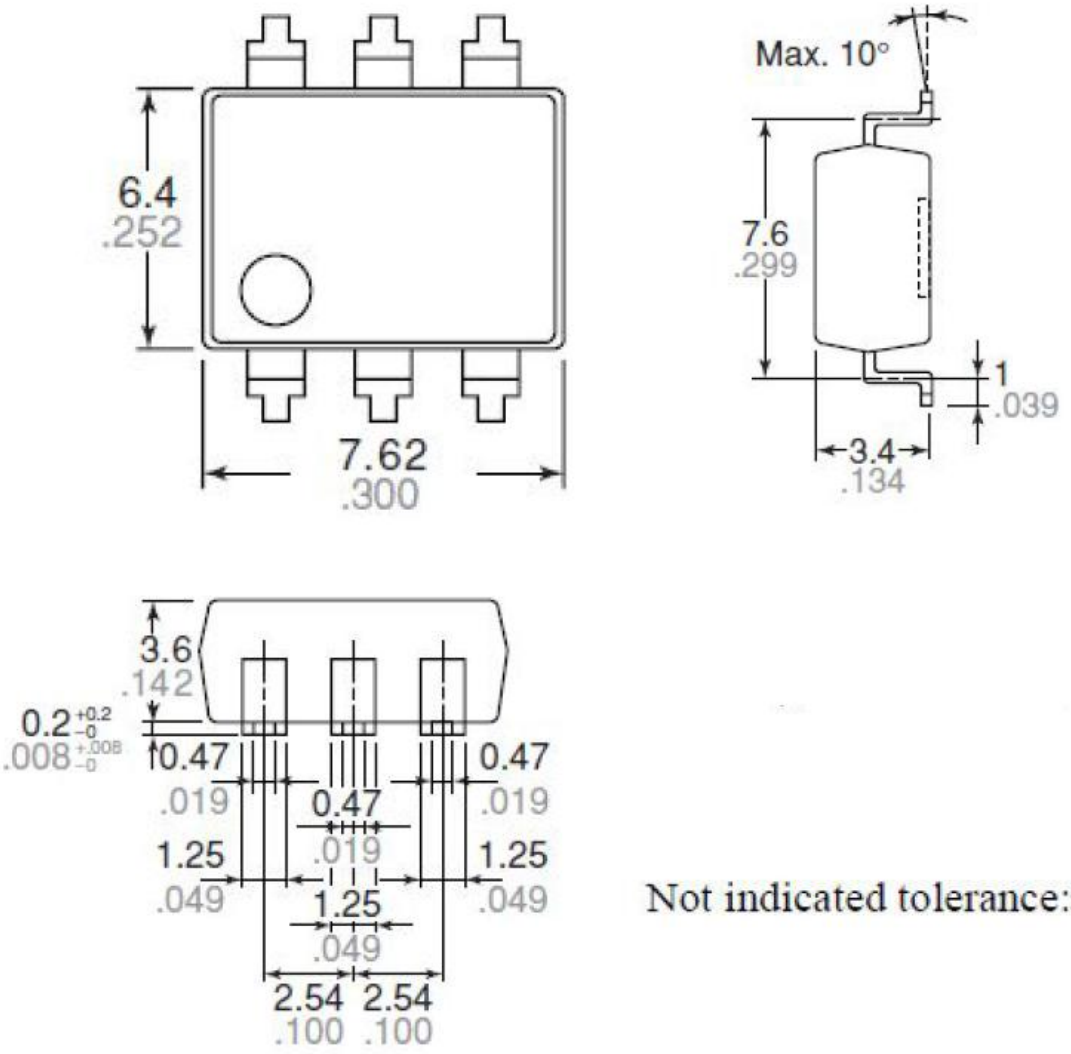
特性参数/Parameter		符号/Symbol	测试条件/Test condition	最小值/Min.	典型值/Typ.	最大值/Max.	单位/Unit
耦合特性/Transfer characteristics	LED 触发电流/trigger current	I_{FT}	V=±5V		3	5	mA
	导通电阻/Output on-state resistence	R_{ON}	I_F=5mA, I_D=400mA		8		Ω
	导通时间/Turn on time	t_{on}	I_F=5mA, I_D=400mA			2	ms
	关断时间/Turn off time	t_{off}	I_F=5mA, I_D=400mA			1	
	介质电压/ I/O Dielectric Strength	V_{ISO}	I_{off}≤0.3mA	5000			V_{rms}
	电容/ I/Ocapacitance	C			1.5		pF
	储存温度/Store temperature	T		-40		100	℃
	工作温度/Operating temperature			-40		100	

外形尺寸/Outline dimension：

DIP6



SMD



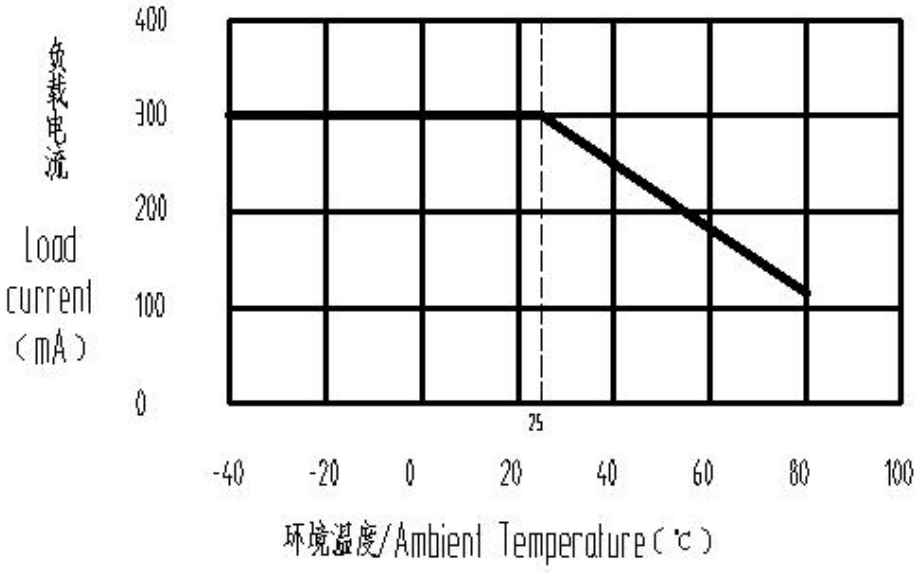
Not indicated tolerance:± 0.2

命名方法/ Naming rule :

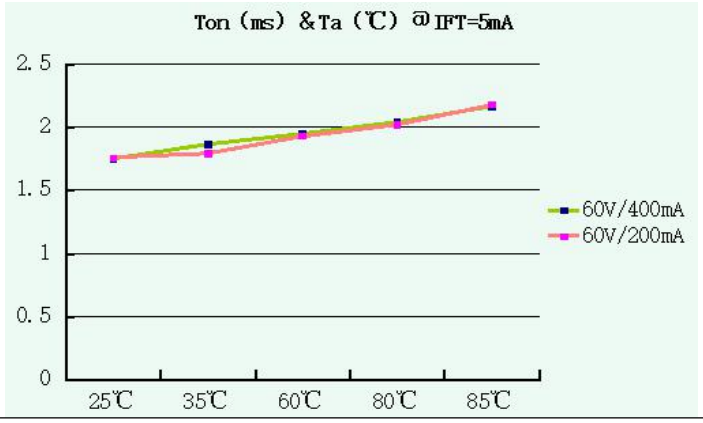
订货标记示例/Order imformation								
	Y	OM	B/	30	50	D	6	A
公司商标代号 Company symbol								
	MOS 输出型 SSR							
			常开型 normal open：默认 nil 常闭型 normal close：B					
				负载电流 load current：10—100mA；16—160mA；30—300mA；40—400mA；100—1000mA				
					击穿电压 BVDSS：6—60V；10—100V；20—200V；35—350V；50—500V			
						D：DIP S：SMD		
							4：PIN 6：6PIN 8:8PIN	
								A：AC D：DC

特性曲线/Characteristic Data:

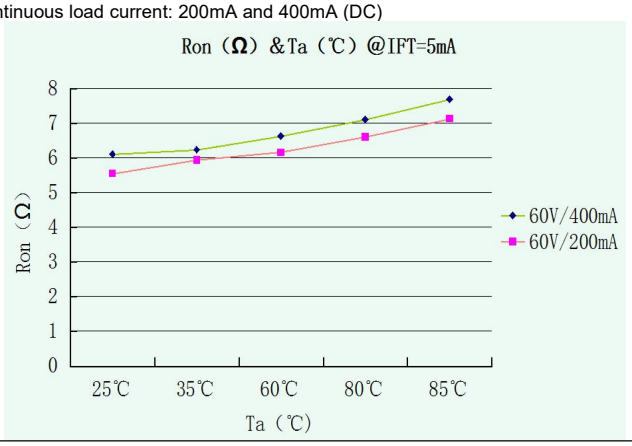
Load current vs. ambient temperature characteristics
Allowable ambient temperature: －40° C to +85° C



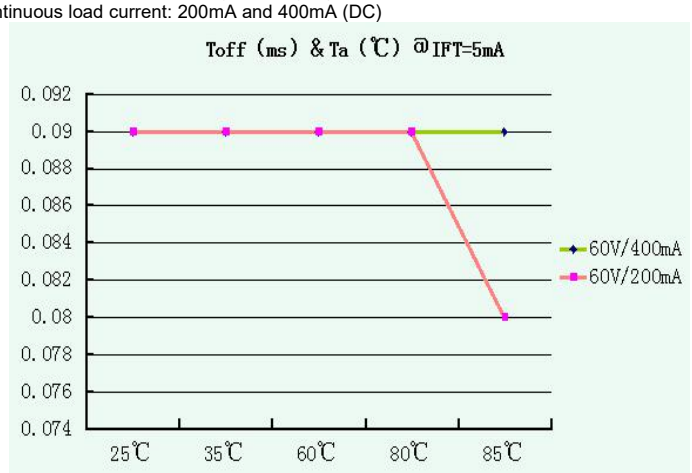
2.Turn on time vs. ambient temperature characteristics：
LED current: 5 mA; Load voltage: 60V. (DC);
Continuous load current: 200mA and 400mA (DC)



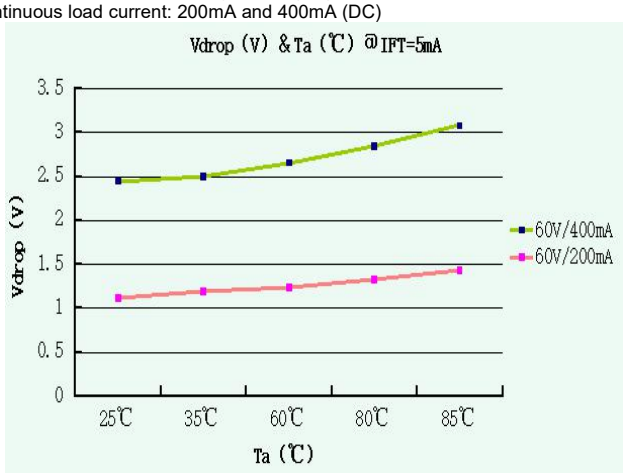
3.On resistance vs. ambient temperature characteristics
Measured pin between terminals 4 and 5, 5 and 6;
LED current: 5 mA; Load voltage: 60V. (DC);
Continuous load current: 200mA and 400mA (DC)



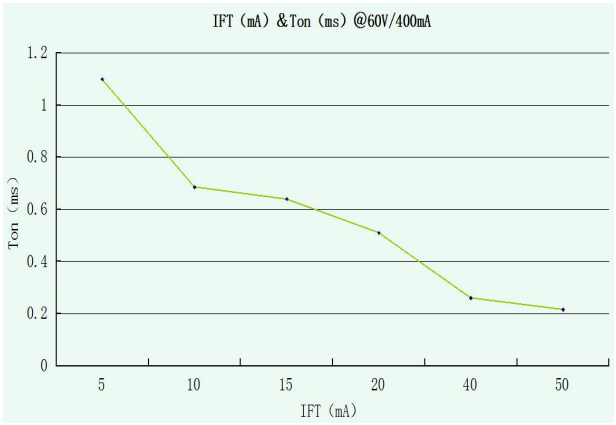
4.Turn off time vs. ambient temperature characteristics
LED current: 5 mA; Load voltage: 60V. (DC);
Continuous load current: 200mA and 400mA (DC)



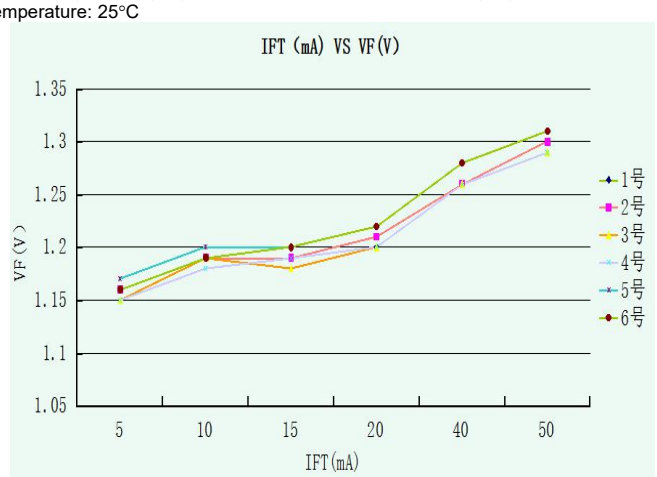
5.Vout Drop. ambient temperature characteristics
LED current: 5 mA; Load voltage: 60V. (DC);
Continuous load current: 200mA and 400mA (DC)



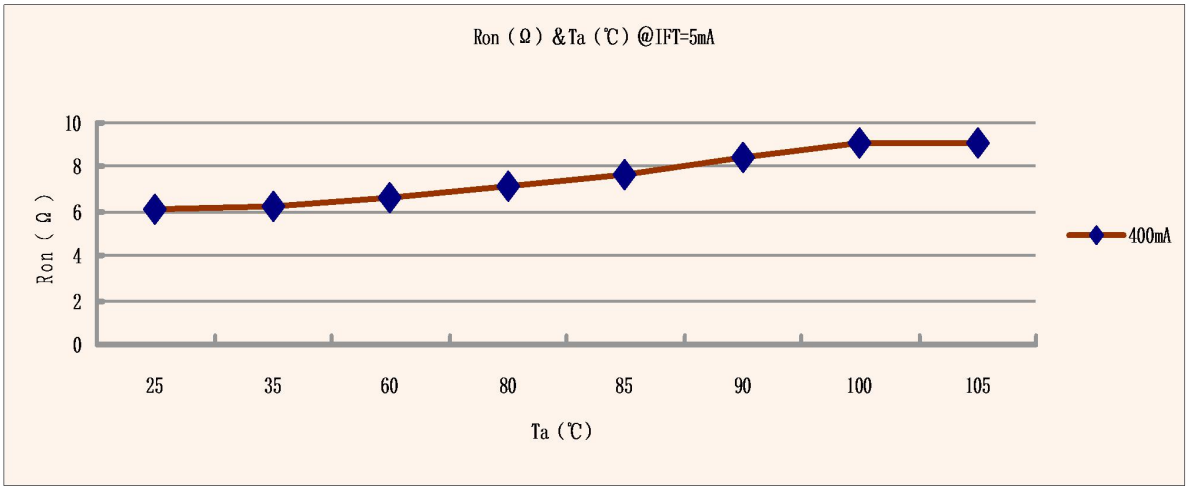
6. Turn on time vs. LED forward current characteristics
Load voltage: 60V. (DC); Continuous load current:
400mA . (DC); Ambient temperature: 25°C



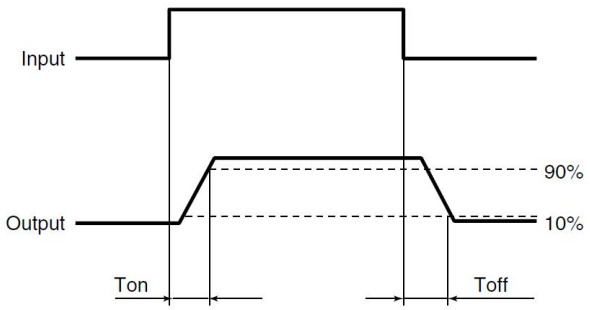
7.LED dropout voltage vs. LED forward current characteristics
Load voltage: 60V. (DC); Continuous load current:400mA . (DC); Ambient temperature: 25°C



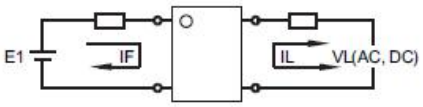
8.On resistance vs. ambient temperature characteristics：Measured pin between terminals 4 and 5, 5 and 6;
LED current: 5 mA; Load voltage: 60V. (DC); Continuous load current: 400mA (DC)

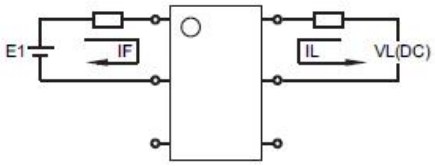


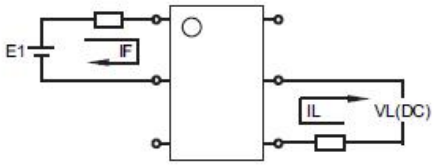
* Turn on/Turn off time

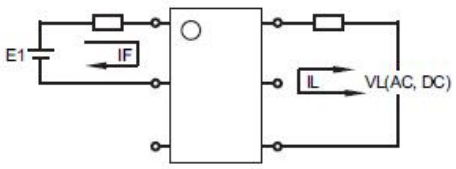


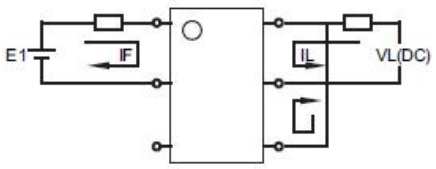
接线图/Wiring diagram:











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 Annexes，fig.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。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。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。) 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。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。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。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。