

ST3M-V252G

光耦继电器 PhotoMOS Relay

特性 Features

- 触点形式 Contact Form : 1组常开 1 Form A
- 负载电压 Load Voltage : 60V
- 负载电流 Load Current : 2.5A
- 漏电流 Low Off-State Leakage Current : 1μA

DIP6



SMD6



典型应用 Application

自动检测设备 Automatic Test Equipment	安全设备 Security Equipment
通信设备 Telephone Equipment	I/O 模块 I/O Modules
传感设备 Sensing Equipment	调制解调器 Modem

绝对最大额定值 Absolute Maximum Ratings (Ta=25°C)

项目 Item	符号 Symbol	ST3M-V252G	备注 Remarks
输入 Input	工作电流 LED Forward Current	I _F	50mA
	正向峰值电流 Peak Forward Current	I _{FP}	1000mA
	反向电压 LED Reverse Voltage	V _R	5V
	输入功耗 Input Power Dissipation	P _{in}	75mW
输出 Output	负载电压 Load Voltage	V _L	60V
	连续负载电流 Continuous Load Current	I _L	2.5A
	峰值负载电流 Peak Load Current	I _{peak}	4A
	输出功耗 Output Power Dissipation	P _{out}	450mW
总功耗 Total Power Dissipation		P _T	500mW
输入输出间隔离电压 I/O Isolation Voltage		V _{I/O}	3750Vrms
工作温度 Ambient Temperature(Operating)		T _{opr}	-40°C ~ +85°C
储存温度 Ambient Temperature(Storage)		T _{stg}	-40°C ~ +100°C

电气性能概要 Electrical Specifications (Ta=25°C)

项目 Item			符号 Symbol	ST3M-V252G	测定条件 Conditions
输入 Input	正向电压 LED Forward Voltage	典型值 Typ.	V _F	1.3V	I _F =10mA
		最大值 Max.		1.5V	
	导通电流 LED Turn-on Current	典型值 Typ.	I _{Fon}	0.5mA	
		最大值 Max.		2mA	
输出 Output	关断电压 LED Turn-off Voltage	最小值 Min.	V _{Off}	0.7V	
	导通电阻 On-Resistance	典型值 Typ.	R _{on}	0.1Ω	I _F =10mA, I _L =100mA within 1 sec
		最大值 Max.		0.2Ω	
	断态漏电流 Off-State Leakage Current	最大值 Max.	I _{leak}	1μA	V _L =Rating
传输特性 Transfer Characteristics	输出端电容 Output Capacitance	典型值 Typ.	C _{out}	165pF	V _L =0V, f=1MHz
	导通时间 Turn-on Time	典型值 Typ.	T _{ON}	2ms	I _F =10mA, I _L =100mA
		最大值 Max.		5ms	
	关断时间 Turn-off Time	典型值 Typ.	T _{OFF}	0.1ms	
		最大值 Max.		0.3ms	
	输入输出间绝缘电阻 Initial I/O Isolation Resistance	最小值 Min.	R _{I/O}	1000MΩ	500VDC
	隔离电容 I/O Isolation Capacitance	典型值 Typ.	C _{I/O}	0.8pF	f=1MHz
				最大值 (1.5pF)	

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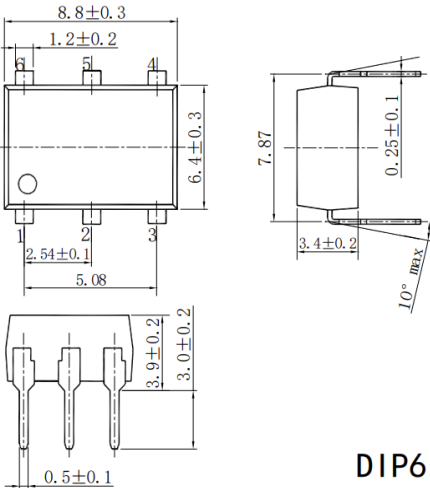
型号命名标准 Model Number Legend

基本型号 Basic Type:	ST3M	-V	2	5	2	G	A	TR
回路构成 Channel Configuration:								
V: 1回路(6脚型) 1 Channel (6-pin)								
W: 2回路(8脚型) 2 Channel (8-pin)								
Y: 1回路(4脚型) 1 Channel (4-pin)								
输出构成 Output Configuration:								
2: 1路/2路常开(AC/DC) 1A/2A (AC/DC)								
4: 1路/2路常闭(AC/DC) 1B/2B (AC/DC)								
6: 1路常开+1路常闭(AC/DC) 1A1B (AC/DC)								
类型 Type:								
1: 普通型 Normal; 5: 低导通电阻型 Low On-resistance								
负载电压 Load Voltage:								
0: 350V; 1: ~40V; 2: 50~60V; 3: 250V; 4: 400V; 5: 80~100V; 6: 600V; 7: 200V; 8: 1500V; 9: 1000V								
特点 Charatristics:								
Blank: 标准 Standard; G: 高容量 High Capacity								
封装 Package:								
Blank: DIP (双列直插式封装 Dual In-line Package); A: SMD (表面安装端子--DIP同间距 Surface Mount Terminal, as DIP Spacing); S: SOP 封装 SOP Package								
包装形态 Packing style:								
Blank: 管装 Tube; TR: Tape and Reel								

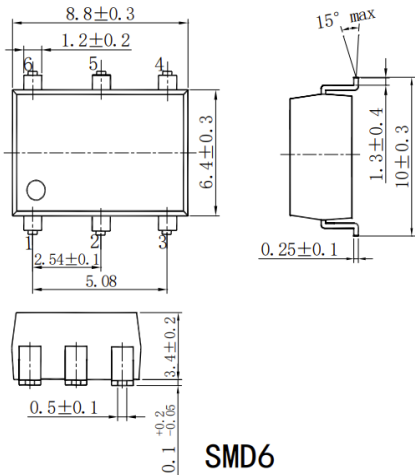
具体型号列表 List of Models

类别 Category	额定输出 Output Rating		标刻型号 Marking Model	订货型号 Part No.
	负载电压 Load Voltage	负载电流 Load Current		
AC/DC 两用 Daual Use	60V	2.5A	ST3M-V252G	ST3M-V252G ST3M-V252GATR

外形尺寸 Outline Dimensions

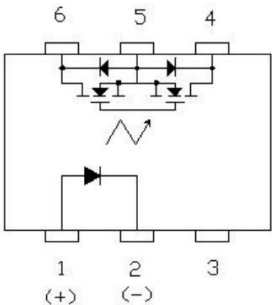


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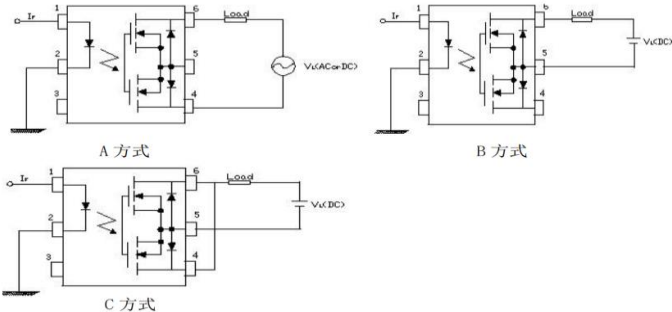


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引脚标识 Terminal Identification

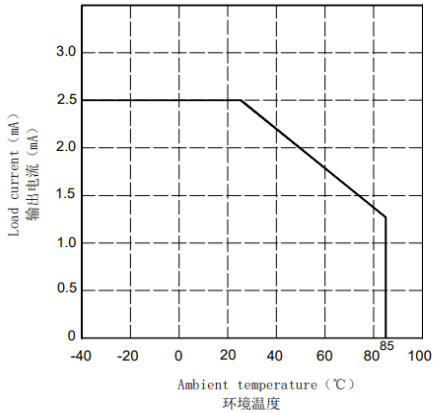


接线图 Wiring Diagram

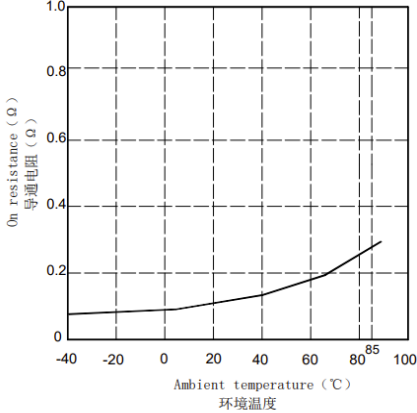


■ 参考数值 Reference Data

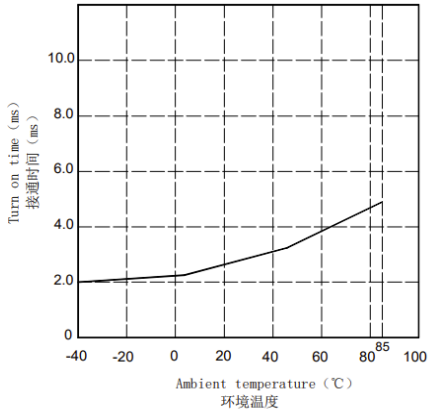
Load current Vs. Ambient temperature
输出电流-环境温度曲线



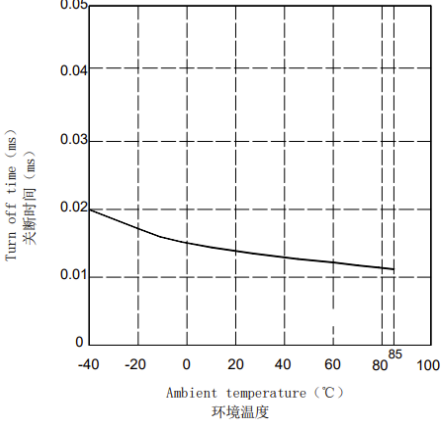
On resistance Vs. Ambient temperature
导通电阻-环境温度曲线



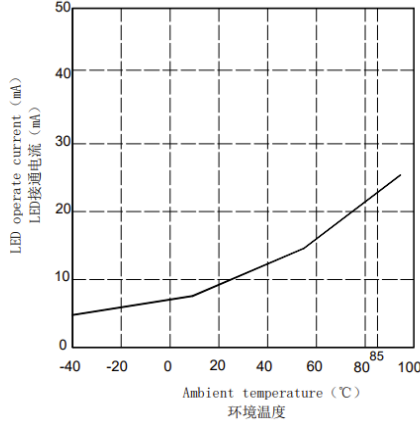
Turn on time Vs. Ambient temperature
接通时间-环境温度曲线



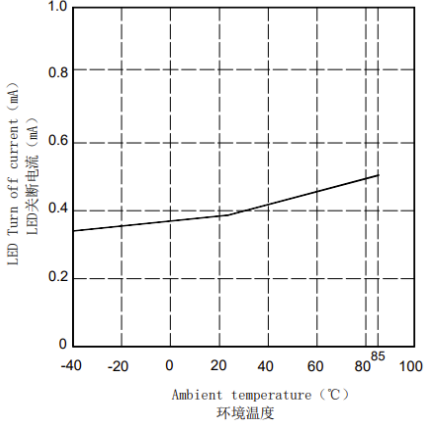
Turn off time Vs. Ambient temperature
关断时间-环境温度曲线



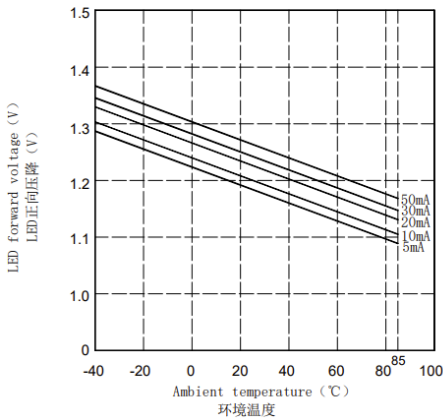
LED operate current Vs. Ambient temperature
输出电流-环境温度曲线



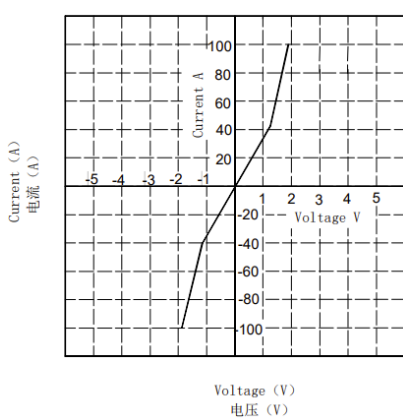
LED turn off current Vs. Ambient temperature
关断电流-环境温度曲线



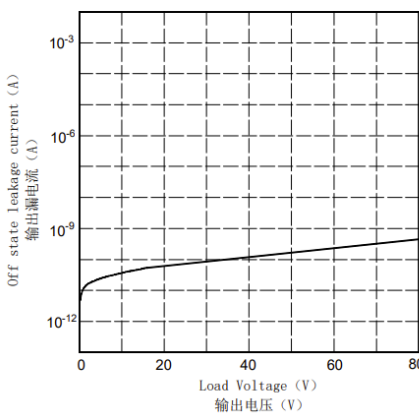
LED forward voltage Vs. Ambient temperature
LED正向电压-环境温度曲线



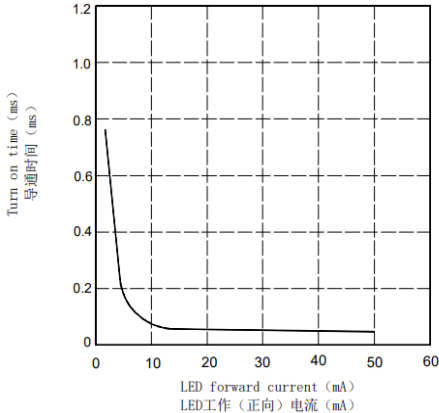
Voltage Vs. current characteristics of output at MOS portion
MOS管输出电压-输出电流曲线



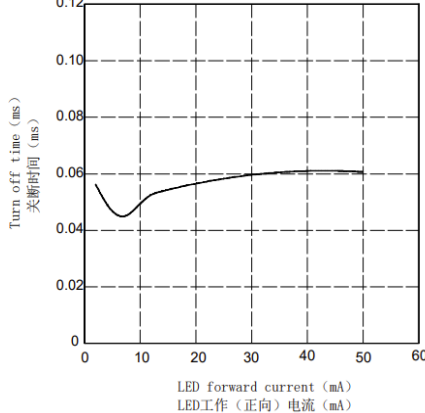
Off state leakage current Vs. Load voltage characteristics
输出漏电流-输出电压曲线



LED forward current Vs. turn on time characteristics
LED正向(工作)电流-导通时间曲线



LED forward current Vs. turn off time characteristics
LED正向(工作)电流-关断时间曲线



Applied voltage Vs. output capacitance characteristics
输出电压-输出电容曲线

