

# 线性光耦

线性光耦是一种通过输入电流的变化来控制电阻特性的光电器件。它是利用CDS、LED半导体，经过严格的挑选、老化、测试而制成的一种模拟线性光电耦合器。本产品属于电流输入控制型，纯电阻无极性输出，已被广泛应用。本公司享有其专利权，专利号：ZL02225334.3

Analog Optoisolator is a King of the photoelectric equipment. It is made of photoresistor and LED, by rigorous selecting, ageing and testing, with pure resistance without polarity output. It is widely used in many different types of circuits and applications.



## 特点(Features):

- 纯电阻材料，无极性输出  
Pure resistor and non-polarity output
- 宽范围类比线性电阻，阻值导通，高阻值关闭  
Wide range of analog linear resistance, the low "ON" resistance, high "OFF" resistance
- 简单的电路结构适合直流和交流应用场合。  
Simple circuit configuration suitable for DC and AC use
- 输入和输出隔离，低失真耦合  
Input to output isolation, and low distortion coupling
- 耐高温PPO材料封装  
Encapsulation with PPO high-temperature resistant material

## 应用范围(Applications):

- 音响校正 Acoustic calibration
- 电机调速 Motor speed velocity
- 彩灯控制 Color lamp control
- 通信传输 Communication transmission
- 影音器材 Audio and video equipment
- 音量调整 Volume control
- 自动控制 Automatic control
- 电源隔离 Power isolation
- 玩具控制 Toy control
- 稳光照明 steady lighting

## 主要技术指标(Technical specifications):

- 输入正向电流 Input forward current: 0-40mA
- 输入正向压降 Input for Voltage drop: 1.6-2.0V DC (the voltage drop range between pin4 and pin1)
- 亮电阻 ON resistance: 100-200ohm
- 暗电阻 OFF resistance: no less than 1MΩ (Measured 10 sec. after removal of the input)
- 输出功率 Output power dissipation: 100mW Max.
- 绝缘电压 Insulating voltage: 2500V DC
- 工作温度 Operating temperature: -30-+70°C

# 线性光耦

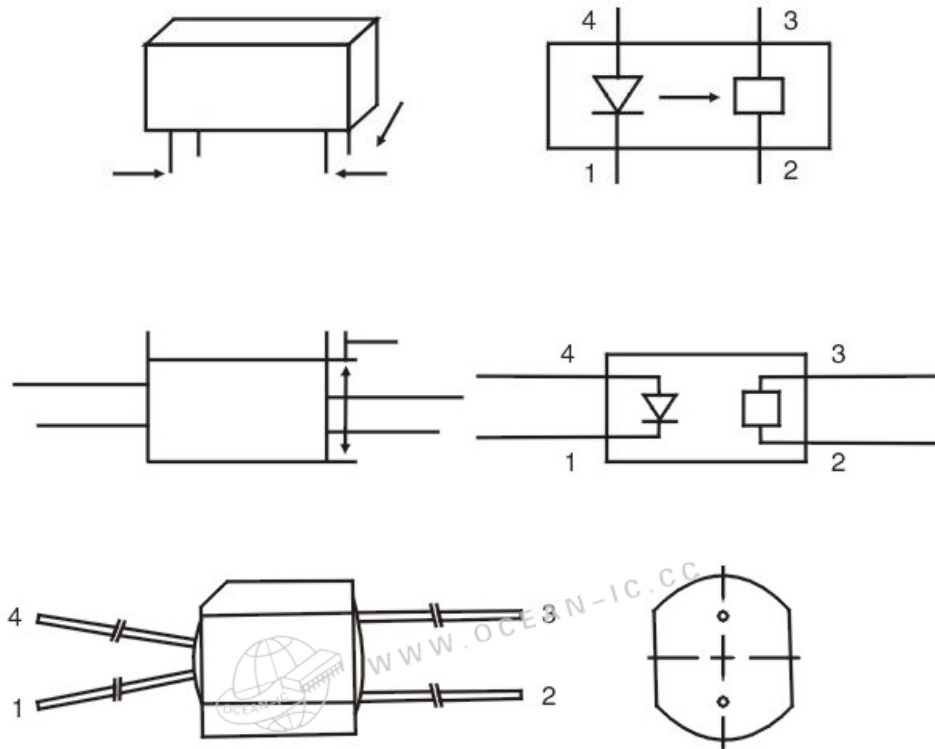
型号 Model: LCR0202 LCR0203 VTL5C

## 封装尺寸(Outline Dimension):

型号 Model	LCR0202	LCR0203	VTL5C
长度 Length	12.5	13.5	9.9
宽度 width	7.5	6.0	9.9
高度 Height	8.0	6.0	7.6
管脚长度 Pin length	8.0	12	12
管脚距离 Pin distance	9X4.5	2.8	2.8
材质 Material	PC	铝材 Aluminum alloy	PC

单位 Unit:mm; 公差 Tolerance:  $\pm 2\text{mm}$

## 尺寸图(Dimensions):



Pin Function:

PIN1: LED IN.GND

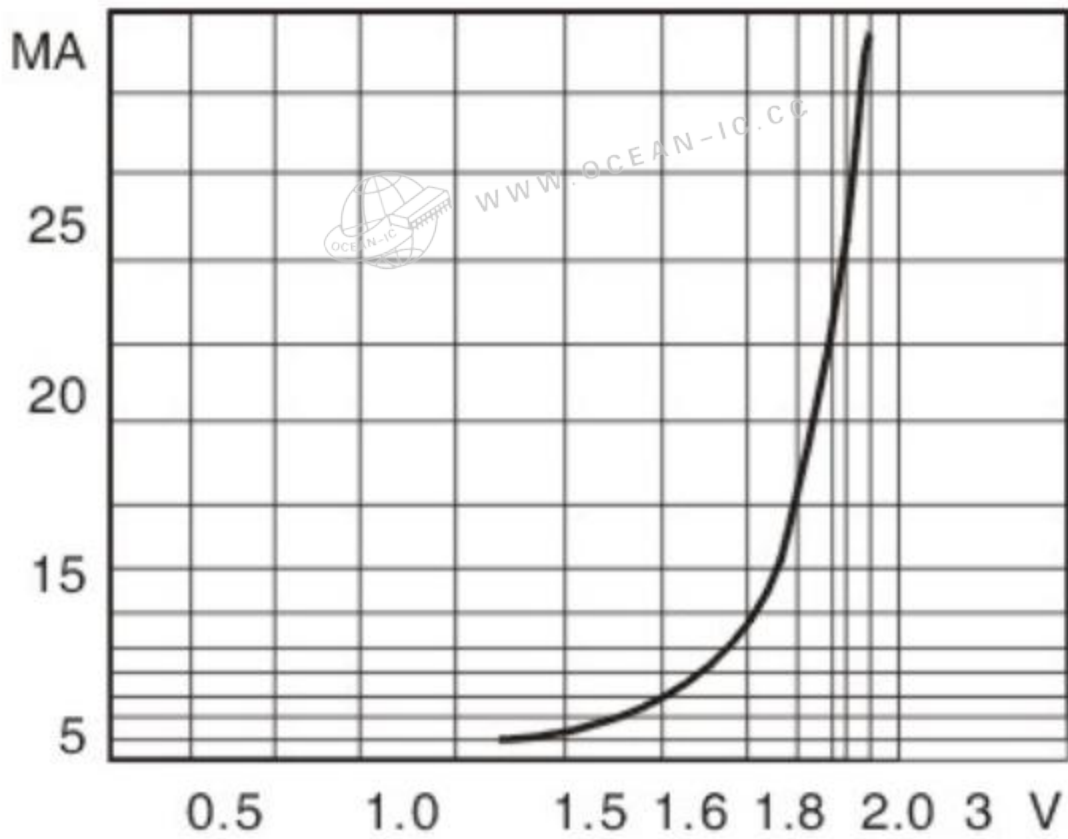
PIN2: OUT.RESISTENCE

PIN3: OUT.RESISTENCE

PIN4: LED IN.VDD

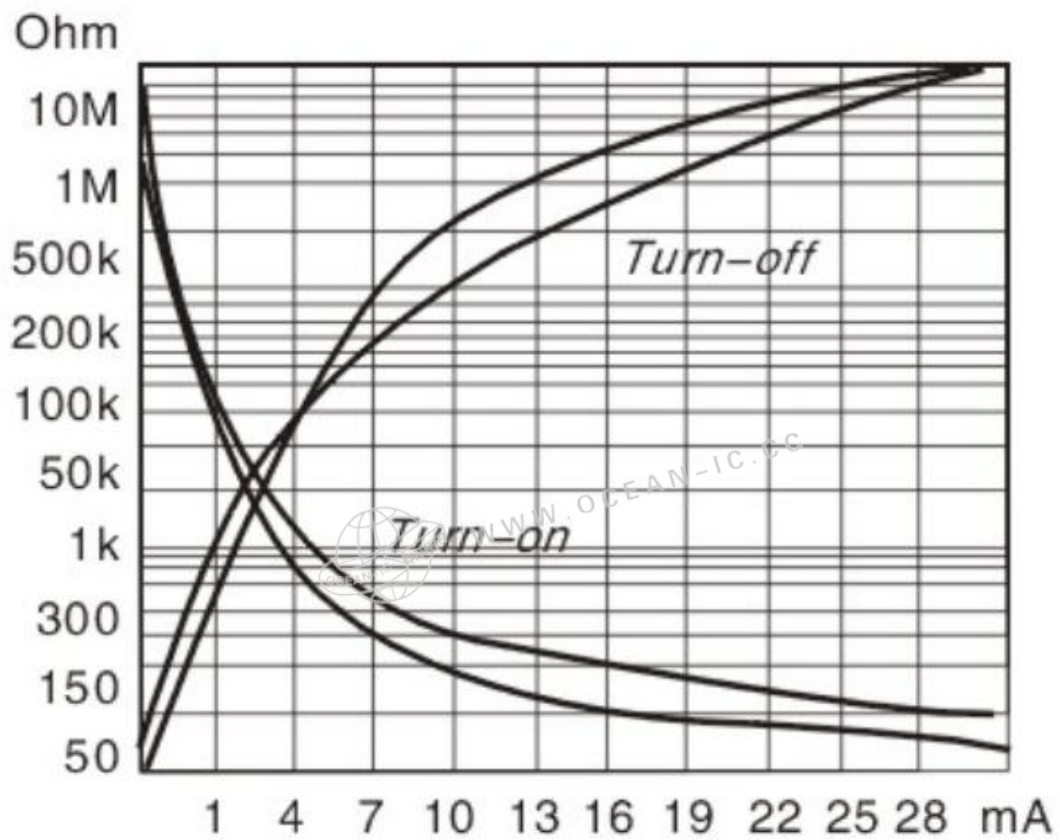
光电特性(Electrical characteristic):

型号 Model	电阻 Light resistance		关闭10秒的电阻 Resistance after shutdown 10 Seconds
	输入电流 Input current	输出电阻 Output resistance	
LCR0202	10mA	50Ω-1KΩ	10MΩ
LCR0203	10mA	50Ω-1KΩ	10MΩ
VTL5C	10mA	50Ω-1KΩ	10MΩ

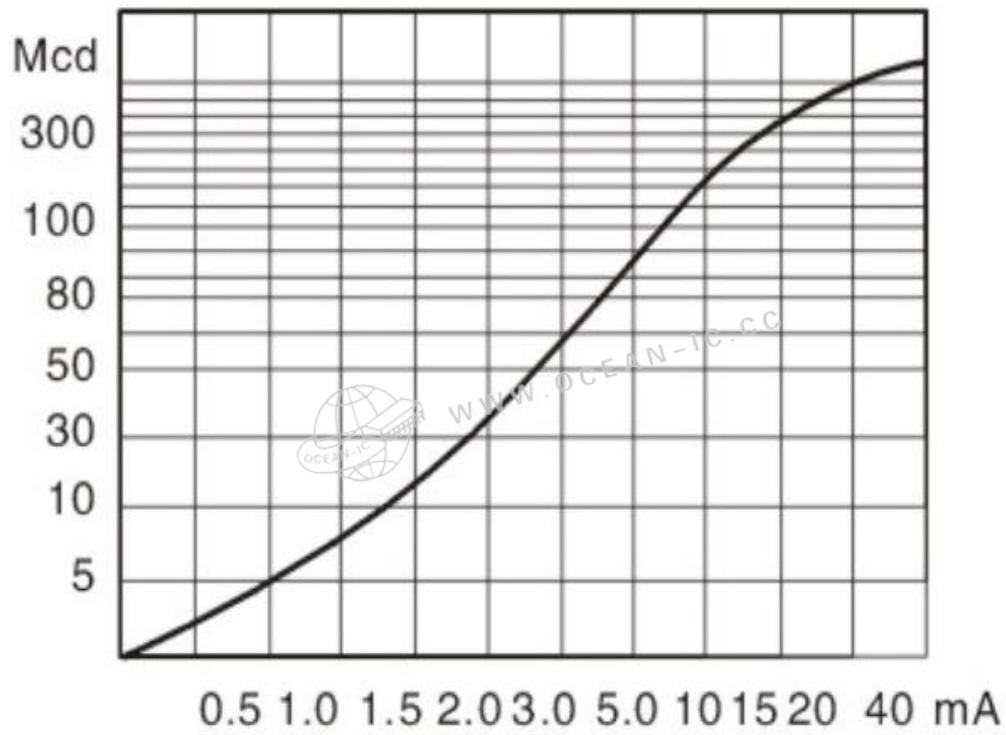


Input v/mA curve





Input mA/ohm curve



Input mA / mcd curve