

# Analog Linear Coupling

MODEL :LCR-0203

## Analog Linear Optical Coupling

Analog Linear Optical Coupling is photoelectric component by inputting the different current to control the changes of resistance. It makes use of CdS and LED semi-conductor with rigorous selection, aging and test. The product is widely used by current input control and pure resistance with non-polarity output. Our company own the patent of manufacturing and the patent number is ZL02225334.3.

### ■ Characteristics

- Pure resistor and non-polarity output.
- Wide range of analog linear resistance, the low “on” resistance, high “off” resistance.
- Simple circuit configuration suitable for DC and AC use.
- Input to output isolation, and low distortion coupling.
- Columnar encapsulation with aluminum alloy material.

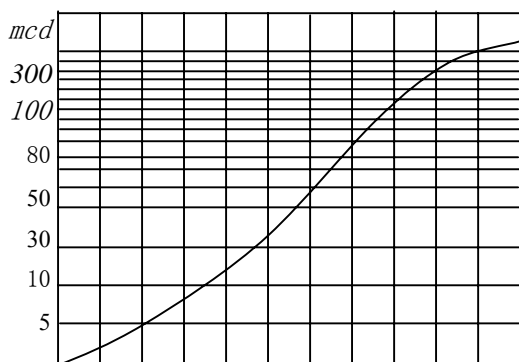
### ■ Applications

- Acoustic protect and control.
- Volume control and electric isolation coupling.
- Light adjust and motor speed control.
- Communication transmission and automatic control.

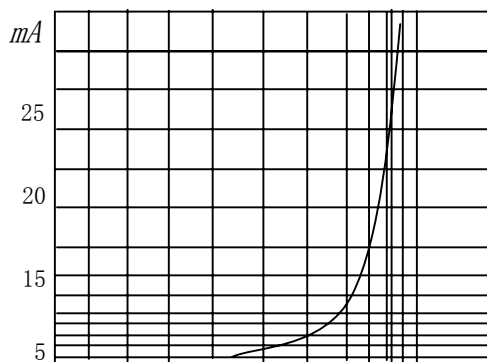
### ■ Specifications

Recommended Model	LCR-0203 Series
Encapsulation	Aluminum Alloy Columnar Type
Input Current	0-20mA ,Max.40mA
Input Voltage	1.6-2.5Vdc
Output Light Resistance	50Ω-1KΩ@20mA-0.01mA
Output Dark Resistance	1-10MΩ@10 seconds off later
Response Time	<2.5mS
Insulating Voltage	>2500VRMS
Working Frequency	<300KHz
Out-cell resist Voltage	<50V
Dynamic Range	<100dB
DC Coupling Capacitance	< 5pF
Max. Power Consumption	100mW
Operating Temp.	-30—+70°C
Storage Temp.	-40—+80°C

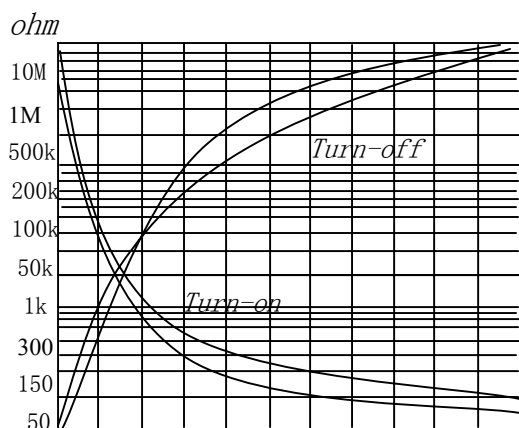
■ Typical Performance Curve



0.5 1.0 1.5 2.0 3.0 5.0 10 15 20 40 mA  
Input mA /mcd curve

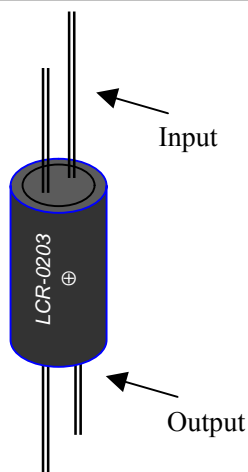


0.5 1.0 1.5 1.6 1.8 2.0 3 V  
Input v/mA curve



1 4 7 10 13 16 19 22 25 28 mA  
Input mA/ohm curve

■ Figure and Dimensions



LCR-0203	Dimensions
Cylindric Diameter	6.0mm
Cylindric Long	13.5mm
Output Lead Length	27.5mm
Input Lead Length	25.0mm
Lead Diameter	0.45mm
Lead Gap	2.8mm
Input Polarity Sign ⊕	LED anode-lead
Ektexine Material	PVC

■ Use and Package

It is recommended that the welding should be made at 4mm of lead wire far away from optoisolator's seat, and the welding be completed in the shortest possible time.

100pcs per small package,3000pcs per big package.