

# 规格书

SPECIFICATION

|               |        |
|---------------|--------|
| 型号：<br>MODEL： | YC256C |
| 版本号：<br>REV：  | V1.0   |

|                      |                  |                   |
|----------------------|------------------|-------------------|
| 客户承认                 |                  |                   |
| APPROVED BY CUSTOMER |                  |                   |
| 确认意见<br>COMMENTS     | 审核<br>CHECKED BY | 批准<br>APPROVED BY |
|                      |                  |                   |

客户承认签章后敬请回传正本一份

Please kindly countersign the document and send it back for our record

# 东莞市亿彩电子科技有限公司

## DONG GUAN EVERCOLOR ELECTRONICS CO.,LTD.

### YC256C

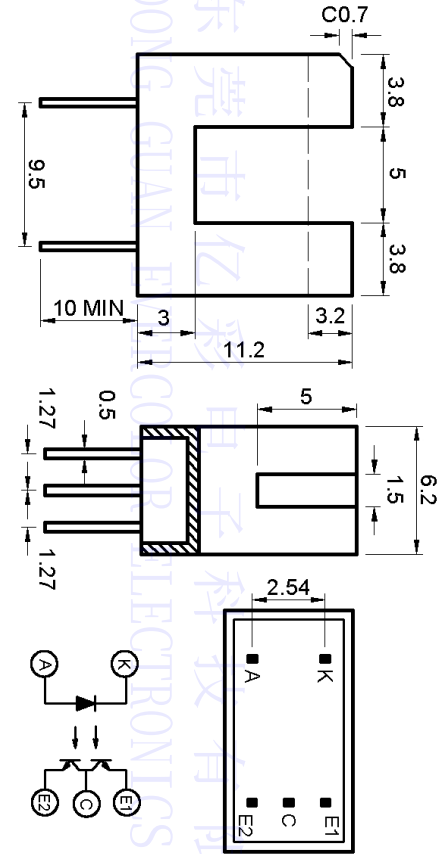
#### ● Features

- Combines high output GaAs IRED with high sensitive twin phototransistor.
  - The phototransistors' centre distance is 0.7mm. any moving object's direction over 1.3mm width can be detected.
  - Non-contact detecting manner.
- #### ● Applications
- IC card electric power meter.
  - AMR system.
  - CCTV pan/tilt control and stage lighting control.
  - Combined with direction detectector IC(st288A), it can be used as detecting moving direction,rotating speed and moving distance etc.

#### ● Dimensions

Unit:mm

Unless othwise specified, the tolerances are  $\pm 0.2\text{mm}$



#### ● Absolute Maximum Ratings( $T_a=25^\circ\text{C}$ )

| Parameter                |                             | Symbol    | Rating       | Unit             |
|--------------------------|-----------------------------|-----------|--------------|------------------|
| Input                    | Forward Current             | $I_F$     | 50           | mV               |
|                          | Reverse Voltage             | $V_R$     | 6            | V                |
|                          | Power Dissipation           | $P$       | 75           | mW               |
| Output                   | Collector-Emitter voltage   | $V_{CEO}$ | 25           | V                |
|                          | Emitter-Collector voltage   | $V_{ECO}$ | 6            | V                |
|                          | Collector Power Dissipation | $P_C$     | 50           | mW               |
| *Operating Temperature   |                             | $T_{opr}$ | $-20\sim 65$ | $^\circ\text{C}$ |
| Storage Temperature      |                             | $T_{stg}$ | $-30\sim 75$ | $^\circ\text{C}$ |
| ** Soldering Temperature |                             | $T_{sol}$ | 260          | $^\circ\text{C}$ |

\*The special requirement could be met according to customer's request.

\*\*Soldering time: 5s max. soldering position: at least 1.5mm from the base of the package.

#### ● Electro-Optical Characteristics( $T_a=25^\circ\text{C}$ )

| Parameter                |                                      | Symbol                         | Condition                                                  | Min. | Typ. | Max. | Unit          |
|--------------------------|--------------------------------------|--------------------------------|------------------------------------------------------------|------|------|------|---------------|
| Input                    | Forward Voltage                      | $V_F$                          | $I_F=20\text{mA}$                                          | -    | 1.25 | 1.5  | V             |
|                          | Reverse Current                      | $I_R$                          | $V_R=3\text{V}$                                            | -    | -    | 10   | $\mu\text{A}$ |
| Output                   | Collector Dark Current               | $I_{CEO1}$                     | $V_{CE}=20\text{V}$                                        | -    | -    | 1    | $\mu\text{A}$ |
|                          |                                      | $I_{CEO2}$                     |                                                            |      |      |      |               |
|                          | Collector Light Current              | $I_{L1}$                       | $V_{CE}=5\text{V}$<br>$I_F=8\text{mA}$                     | 0.25 | -    | -    | mA            |
|                          |                                      | $I_{L2}$                       |                                                            |      |      |      |               |
|                          | Collector-Emitter Saturation Voltage | $V_{CE(SAT)}$<br>$V_{CE(SAT)}$ | $I_F=8\text{mA}$<br>$I_C=0.15\text{mA}$                    | -    | -    | 0.4  | V             |
| Transfer Characteristics | Response Time                        | Rise Time                      | $I_F=20\text{mA}$<br>$V_{CE}=5\text{V}$<br>$R_C=100\Omega$ | -    | 5    | -    | $\mu\text{S}$ |
|                          |                                      | Fall Time                      |                                                            | -    | 5    | -    | $\mu\text{S}$ |