

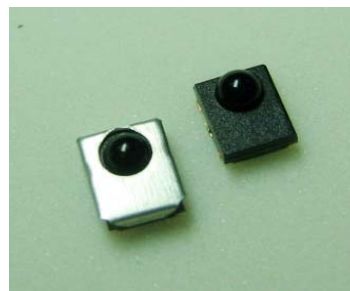
## NEW PRODUCT



### 4.3mmX5.2mm Small Size SMD Package Remocon

#### Description

The KSM-50xSeries consist of a PIN photodiode of high speed and a preamplifier IC in the package as a receiver for infrared remote control systems



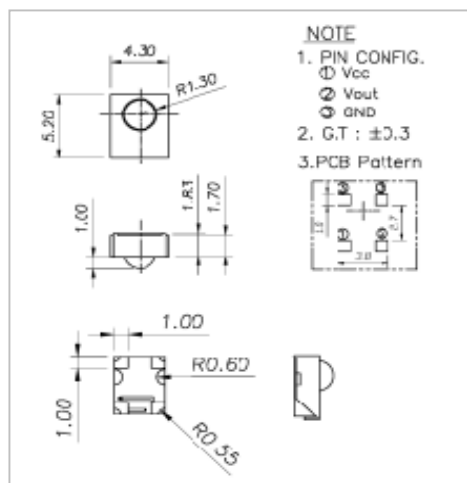
#### Features

- Small Size SMD Package
- Wide Supply-Voltage Range : 2.7V to 5.5V
- Shielded against Electrical Field Disturbance
- High Immunity against Ambient Light Disturbances (Logic Controller Adaptation)

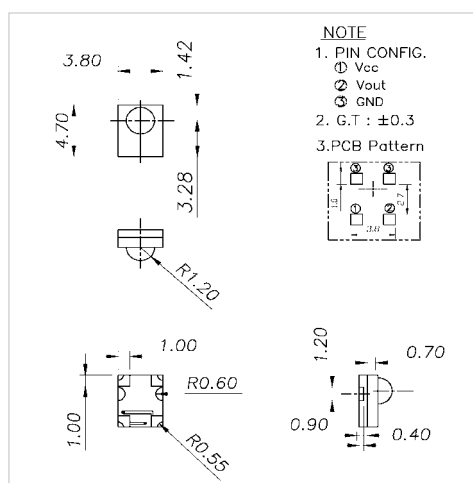
#### Application

- Audio & Video Applications (TV, VTR, Audio, DVDP, CDP)
- Home Appliances (Air conditioner, Computer, Camcoder)
- Wireless Toys
- Remote Control Equipment

#### Outline Dimensions



KSM-50xM2S



KSM-50xN2S

## ELECTRO- OPTICAL CHARACTERISTICS

### ■ KSM-50xM2S

[Ta= 25°C ]

| Description                   | Symbol            | Condition                 |        | Min. | Typ. | Max. | Unit |
|-------------------------------|-------------------|---------------------------|--------|------|------|------|------|
| Recommended Supply Voltage    | V <sub>CC</sub>   |                           |        | 2.7  | -    | 5.5  | V    |
| Current Consumption           | I <sub>CC</sub>   | No signal input           |        | 0.5  | 0.8  | 1.5  | mA   |
| Peak Wavelength               | λ <sub>P</sub>    |                           |        | -    | 940  | -    | nm   |
| B.P.F Center Frequency        | f <sub>o</sub>    |                           |        | -    | 37.9 | -    | kHz  |
| Transmission Distance         | L                 | 250 ±50lx                 | 0 °    | 8    | -    | -    | m    |
|                               |                   |                           | ± 30 ° | 5    | -    | -    |      |
| High Level Output voltage     | V <sub>OH</sub>   | 30cm over<br>the ray axis |        | 4.2  | 5.0  | -    | V    |
| Low Level Output voltage      | V <sub>OL</sub>   |                           |        | -    | 0.1  | 0.5  | V    |
| High Level Output Pulse Width | T <sub>WH</sub>   | Burst wave=600 μs         |        | 400  | 600  | 800  | μs   |
| Low Level Output Pulse Width  | T <sub>WL</sub>   | Period = 1.2ms            |        | 400  | 600  | 800  | μs   |
| Output Form                   | Active Low Output |                           |        |      |      |      |      |

### ■ KSM-50xN2S

[Ta= 25°C ]

| Description                   | Symbol            | Condition                 |        | Min. | Typ. | Max. | Unit |
|-------------------------------|-------------------|---------------------------|--------|------|------|------|------|
| Recommended Supply Voltage    | V <sub>CC</sub>   |                           |        | 2.7  | -    | 5.5  | V    |
| Current Consumption           | I <sub>CC</sub>   | No signal input           |        | 0.5  | 1.2  | 1.7  | mA   |
| Peak Wavelength               | λ <sub>P</sub>    |                           |        | -    | 940  | -    | nm   |
| B.P.F Center Frequency        | f <sub>o</sub>    |                           |        | -    | 37.9 | -    | kHz  |
| Transmission Distance         | L                 | 250 ±50lx                 | 0 °    | 8    | -    | -    | m    |
|                               |                   |                           | ± 30 ° | 5    | -    | -    |      |
| High Level Output voltage     | V <sub>OH</sub>   | 30cm over<br>the ray axis |        | 4.5  | 5.0  | -    | V    |
| Low Level Output voltage      | V <sub>OL</sub>   |                           |        | -    | 0.1  | 0.5  | V    |
| High Level Output Pulse Width | T <sub>WH</sub>   | Burst wave=600 μs         |        | 500  | 600  | 700  | μs   |
| Low Level Output Pulse Width  | T <sub>WL</sub>   | Period = 1.2ms            |        | 500  | 600  | 700  | μs   |
| Output Form                   | Active Low Output |                           |        |      |      |      |      |