

KOP-1021A

Features

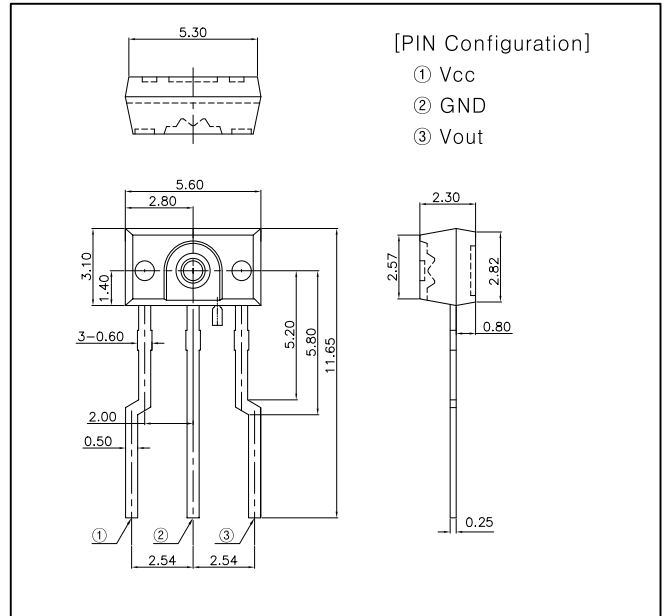
- High PD Sensitivity Optimized for Red Light
- Data Rate between 100Kbps and 16Mbps
- Low Power Consumption for Extended Battery Life
- Built-in Threshold Control for Improved Noise Margin

Applications

- Digital Optical Data-Links
- Dolby AC-3 Digital Audio Interface
- Amplifier

Dimensions

(Unit : mm)



Absolute Maximum Ratings

[Ta = 25 °C]

| Description | Symbol | Ratings | Condition |
|--------------------------|------------------|-----------------------|-----------|
| Power Supply Voltage | V _{cc} | -0.5 ~ +7.0 | - |
| Input Voltage | V _{IN} | V _{cc} +0.3V | - |
| Operating Temperature | T _{opr} | -20 ~ +70 °C | - |
| Storage Temperature | V _{stg} | - 30 ~ + 80 °C | - |
| Soldering Temperature *1 | T _{sol} | 260 °C | - |

*1 : Soldering Time ≤ 10 seconds(At a distance of 1mm from the package)

Electro-Optical Characteristics

[V_{cc}= 5V, Ta= 25 °C]

| Parameter | Symbol | Characteristics | Condition |
|------------------------------------|------------------|-----------------|-----------|
| Operating Supply Voltage | V _{cc} | 4.75 ~ 5.25 V | - |
| Peak Emission Wavelength | λ _p | TYP 700 nm | - |
| Data Rate | T | MAX 16 Mbps | - |
| Optical Output Coupling with Fiber | P _c | MIN -24 dBm | - |
| Current Consumption | I _{cc} | MAX 6.0 mA | - |
| Input High Level | V _{IH} | MIN 2.4 V | - |
| Input Low Level | V _{IL} | MAX 0.4 V | - |
| Propagation Delay Time (H -> L) | t _{pHL} | MAX 100 ns | - |
| Propagation Delay Time (L -> H) | t _{pLH} | MAX 100 ns | - |
| Rise Time | t _r | MAX 15 ns | - |
| Fall Time | t _f | MAX 15 ns | - |
| Pulse Width Distortion | Δtw | MAX 25 ns | - |
| Jitter | Δtj | MAX 5 ns | - |