

# KOD-1086

**Features**

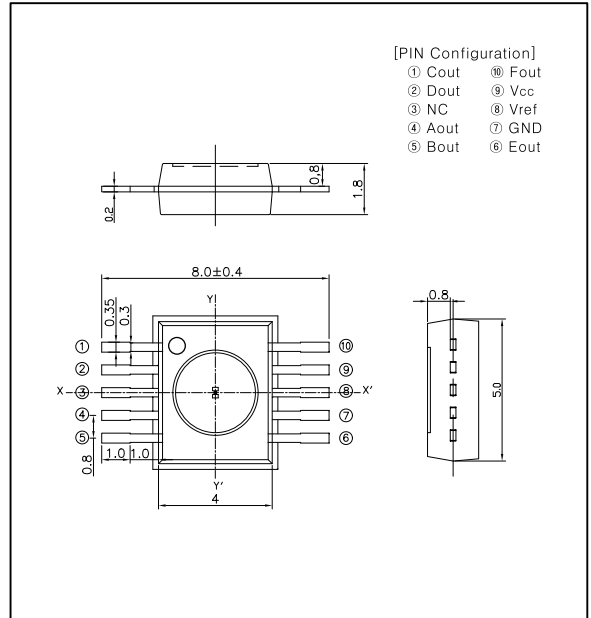
- Low Voltage Operation (2.5V ~ 5.5V)
- Frequency Characteristics : 8 MHz (Typ)
- Built-in Trans-Impedance Amplifier (Current-to-Voltage Conversion Circuit)
- High PD Sensitivity
- Recommended Diode for CD Applications is an IR Laser Diode ( $\lambda=780\text{nm}$ )
- Supports Focus Servo (Astigmatism method) and Tracking Servo (Three beam method)

**Applications**

- Optical Pick-up for Video CD-players
- CD-ROM / CD-MP3 players / CD Audio

**DIMENSIONS**

(Unit : mm)



**Absolute Maximum Ratings**

[Ta = 25°C ]

Description	Symbol	Ratings	Condition
Power Supply Voltage	V <sub>CC</sub>	2.5 ~ 5.5V	-
Power Dissipation	P <sub>D</sub>	100 mW	-
Storage Temperature	T <sub>stg</sub>	- 30 ~ + 80°C	-

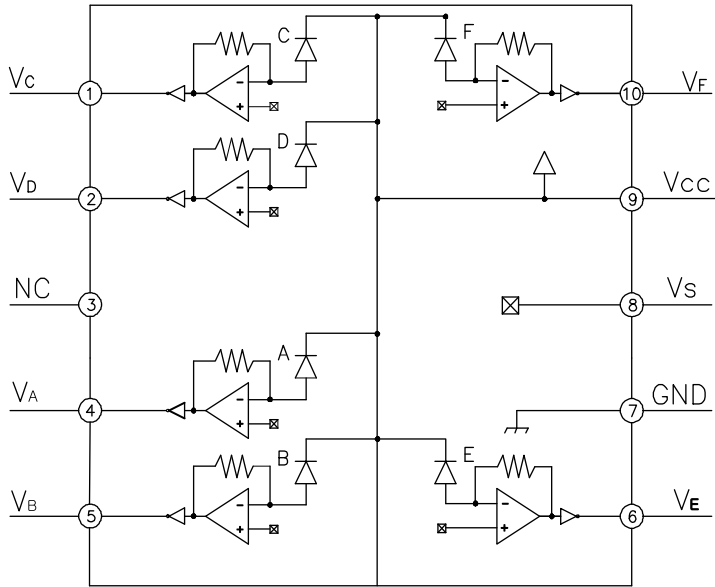
**Electro-Optical Characteristics**

[Ta = 25°C ]

Parameter	Symbol	Characteristics	Condition
Output Offset Voltage	V <sub>off</sub>	±12mV	Offset Voltage with Respect to Vref
Output Offset Voltage Difference	ΔV <sub>off</sub>	±12mV	V <sub>A</sub> ~ V <sub>D</sub>
		±10mV	V <sub>E</sub> ~ V <sub>F</sub>
Sensitivity	V <sub>o</sub>	MIN 325 mV	λ = 780nm, V <sub>A</sub> ~ V <sub>D</sub>
		MIN 690 mV	λ = 780nm, V <sub>E</sub> ~ V <sub>F</sub>
Cutoff Frequency	f <sub>c</sub>	TYP 8.0 MHz	100kHz , -3dB (A~D)
		TYP 400 kHz	100Hz , -3dB (E~F)
Maximum Output Voltage	V <sub>omax</sub>	MIN 4.0V	P <sub>o</sub> = 100 μW , λ = 780nm
Operating Temperature Range	T <sub>opr</sub>	-20 ~ +75°C	-

**KOD-1086**

**Block Diagram**



**Detecting Pattern of Photo Diode**

