

Photo diode IC

KODENSHI

KOD-1086

Features

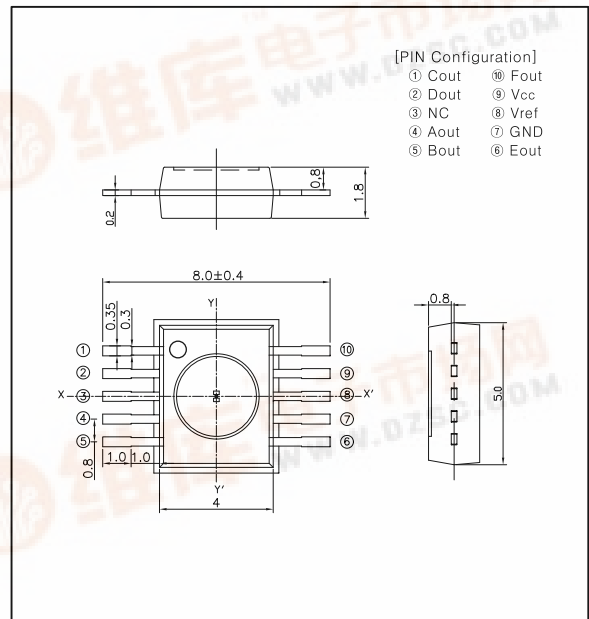
- Low Voltage Operation (2.5V ~ 5.5V)
- Frequency Characteristics : 8 MHz (Typ)
- Built-in Trans-Impedance Amplifier
(Current-to-Voltage Conversion Circuit)
- High PD Sensitivity
- Recommended Diode for CD Applications is
an IR Laser Diode ($\lambda=780\text{nm}$)
- Supports Focus Servo (Astigmatism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

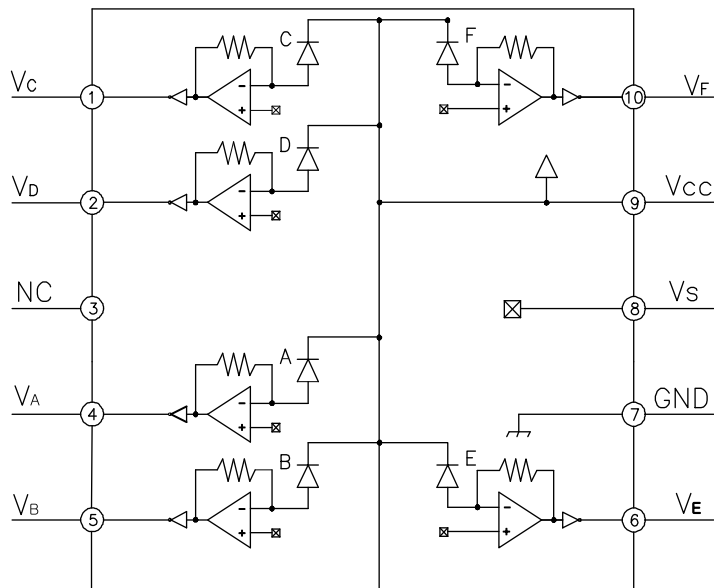
Description	Symbol	Ratings	Condition
Power Supply Voltage	V _{cc}	2.5 ~ 5.5V	-
Power Dissipation	P _D	100 mW	-
Storage Temperature	T _{stg}	- 30 ~ + 80°C	-

Electro-Optical Characteristics

[Ta = 25°C]

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

Block Diagram



Detecting Pattern of Photo Diode

