

KOD-1017

Features

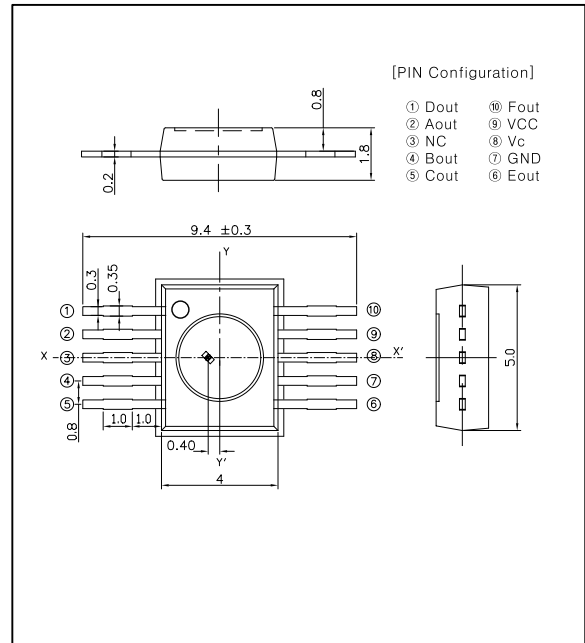
- Low Voltage Operation (2.5V ~ 5.5V)
- Frequency Characteristics : 8 MHz (Typ)
- Built-in Trans-Impedance Amplifier (current-to-voltage conversion circuit)
- High PD Sensitivity
- Recommended Diode for CD Applications is an IR Laser Diode ($\lambda = 780\text{nm}$)
- Supports Focus Servo (Astigmatism 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	200 mW	-
Storage Temperature	T _{stg.}	-40 ~ +85 °C	-

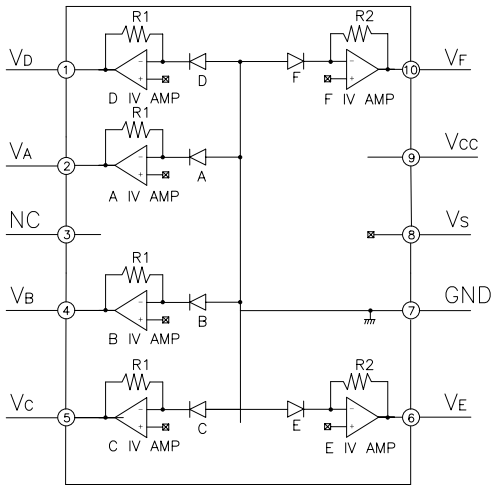
Electro-Optical Characteristics

[Ta = 25 °C]

Parameter	Symbol	Characteristics	Condition
Output Offset Voltage	V _{off}	±15mV	Offset voltage with Respect to Vref
Output Offset Voltage Difference	ΔV_{off}	±20mV	V _A ~ V _D
		±15mV	V _E ~ V _F
Sensitivity	V _o	MIN 290 mV	$\lambda = 780\text{nm}$, V _A ~ V _D
		MIN 610 mV	$\lambda = 780\text{nm}$, V _E ~ V _F
Cutoff Frequency	f _c	TYP 8.0 MHz	100 kHz , -3dB (A-D)
		TYP 400 KHz	10 kHz , -3dB (E-F)
Maximum Output Voltage	V _{omax}	MIN 4.0V	P _o = 100 μ W , $\lambda = 780\text{nm}$
Operating Temperature Range	T _{opr}	-20 ~ +75 °C	-

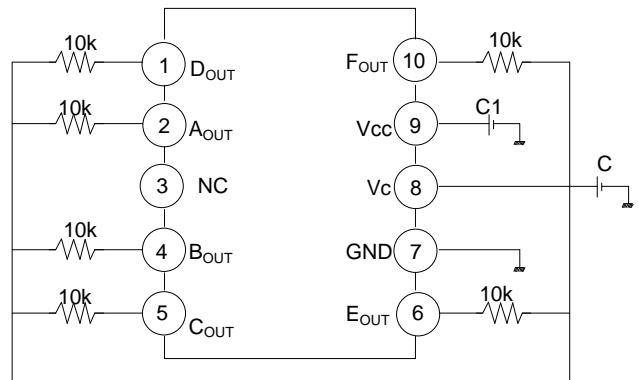
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Block Diagram



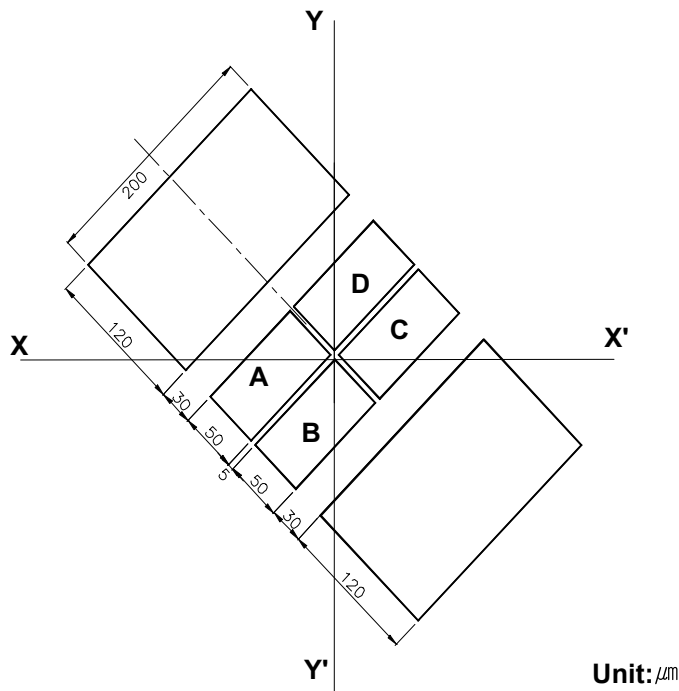
R1=182KΩ R2 = 182KΩ
A-F Photodiodes

Test Measurement Circuit Diagram



Note: C1 and Cw are 0.1uF Capacitors

Detecting Pattern of Photo Diode



Unit: μm