

# KOD-2410

KOD - 2410 is a photo IC developed as a detector for optical pick ups of compact discs. The output impedance is low and stable due to the I - V amplifier. The detectors of tracking are set on both sides of 4 segmented photodiodes.

**FEATURES**

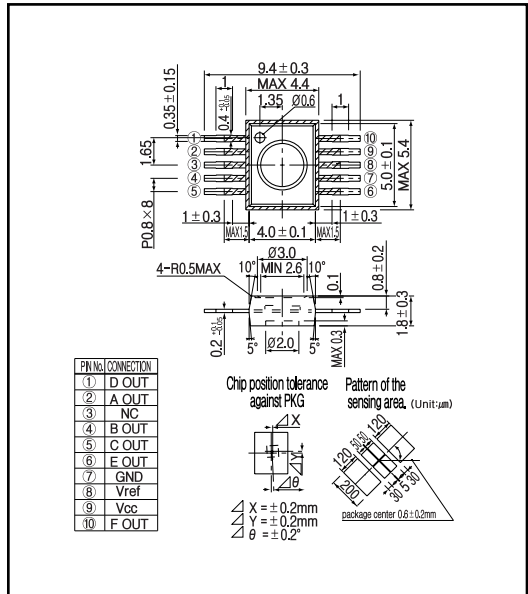
- Bult - in I - V amplifier (current - to - voltage converter)
- Laser beam focusing/positioning is best performed by 4 segmented photodiodes
- Compact, clear mold package

**APPLICATIONS**

- Signal ditecton, focusing and positioning for CD and other optical disks.

**DIMENSIONS**

(Unit : mm)



**MAXIMUM RATINGS**

(Ta=25 )

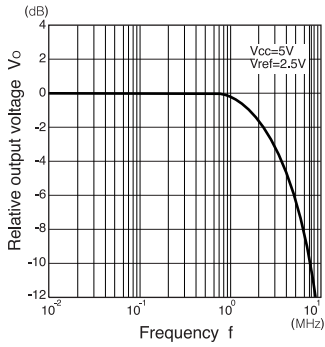
Item	Symbol	Rating	Unit
Supply voltage	V <sub>cc</sub>	6	V
Power dissipation	P <sub>o</sub>	100	mW
Operating temp.	T <sub>opr.</sub>	- 20 + 80	
Storage temp.	T <sub>stg.</sub>	- 30 + 85	

**ELECTRO-OPTICAL CHARACTERISTICS**

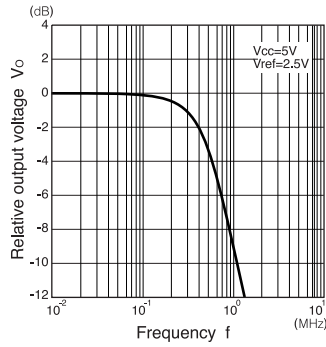
( V<sub>cc</sub>=3V,Vref=1.5V,R=10k ,C<sub>i</sub>=10k ,Ta=25 )

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Current consumption	V <sub>cc</sub>	(shading)		3	3.8	mA
Output offset voltage (A F)	V <sub>off</sub>	(shading)	- 15	0	15	mV
Output offset voltage difference (A F)	V <sub>off</sub>	(A+B) - (C+D) (shading)	- 15	0	15	mV
		(A+D) - (B+C) (shading)	- 15	0	15	mV
		(A+C) - (B+D) (shading)	- 15	0	15	mV
		E - F (shading)	- 10	0	10	mV
Output voltage(A D)	V <sub>o</sub>	P <sub>o</sub> =10μW =780nm	290	370	450	mV
Output voltage(E,F)	V <sub>o</sub>	P <sub>o</sub> =10μW =780nm	610	770	930	mV
Maximum output voltage(A D)	V <sub>omax</sub>	P <sub>o</sub> =100μW =780nm	2.0	2.2		V
Maximum output voltage(E,F)	V <sub>omax</sub>	P <sub>o</sub> =100μW =780nm	2.5	2.9		V
Cutoff frequency(A D)	f <sub>c</sub>	100kHz - 3dB	2.5	3.0		MHz
Cutoff frequency(E,F)	f <sub>c</sub>	10kHz - 3dB	100	400		KHz

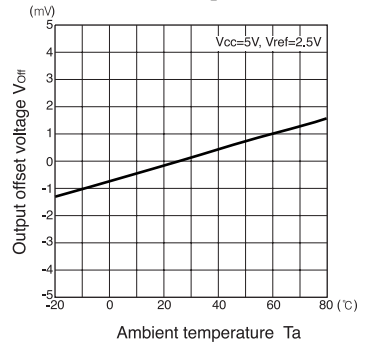
**Focus**



**Tracking**



**Output offset voltage Vs. Ambient temperature**



**Relative output voltage Vs. Ambient temperature**

