

KOD-2410

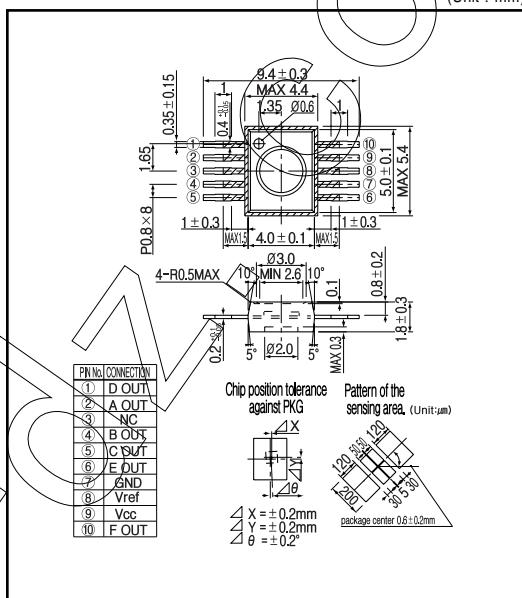
KOD - 2410 is a photo IC developed as a detector for optical pick ups of compact discs. The output impedance is low and stable due to the I - V amplifier. The detectors of tracking are set on both sides of 4 segmented photodiodes.

FEATURES

- Built-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 detection, focusing and positioning for CD and other optical disks.

DIMENSIONS**MAXIMUM RATINGS**

Item	Symbol	Rating	Unit
Supply voltage	V _{cc}	6	V
Power dissipation	P _o	100	mW
Operating temp.	Topr.	- 20 +80	
Storage temp.	Tstg.	- 30 +85	

(Ta=25 °C)

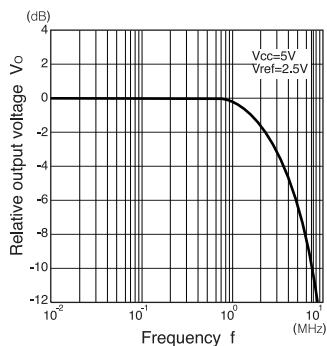
ELECTRO-OPTICAL CHARACTERISTICS(V_{cc}=3V, Vref=1.5V, R=10kΩ, C=10kF, Ta=25°C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Current consumption	V _{cc}	(shading)		3	3.8	mA
Output offset voltage(A, F)	V _{off}	(shading)	- 15	0	15	mV
		(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 _o	Po=10μW = 780nm	290	370	450	mV
Output voltage(E, F)	V _o	Po=10μW = 780nm	610	770	930	mV
Maximum output voltage(A, D)	V _{omax}	Po=100μW = 780nm	2.0	2.2		V
Maximum output voltage(E, F)	V _{omax}	Po=100μW = 780nm	2.5	2.9		V
Cutoff frequency(A, D)	f _c	100kHz - 3dB	2.5	3.0		MHz
Cutoff frequency(E, F)	f _c	10kHz - 3dB	100	400		kHz

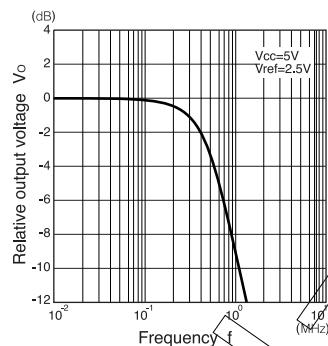
Photo diode IC

KOD-2410

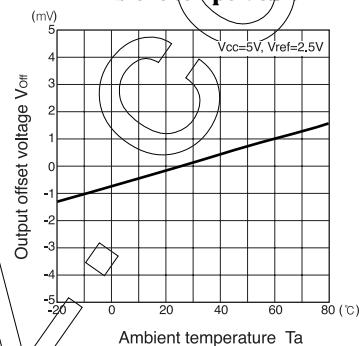
Focus



Tracking



Output offset voltage Vs. Ambient temperature



Relative output voltage Vs. Ambient temperature

