

Photo interrupters (Encoders)

KODENSHI

KE - 204

KE-204 is an encoder module of photointerrupter type combining a high output IRED with photo IC. A rotating detection system of high quality and high reliability can be built easily with this module. Down sizing is possible.

FEATURES

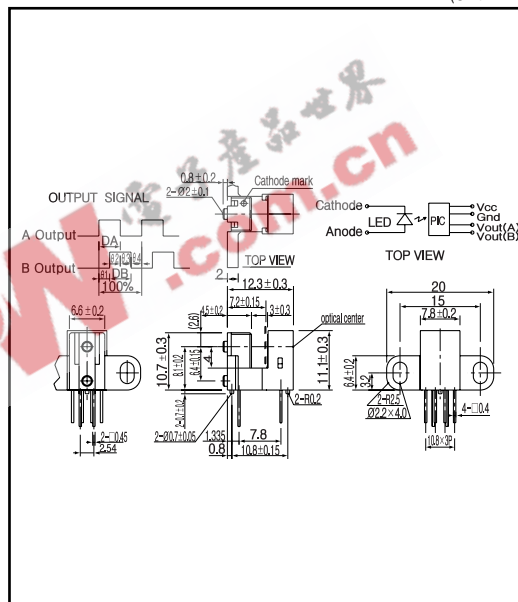
- Directly connectable to CMOS
- Built in comparator circuit of push-pull system
- Built in digital output and pull-up resistor of 20k
- Free design at random resolution from 50-150LPI

APPLICATIONS

- Disk drive
- Copier
- Facsimile
- Printer

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25)

Item	Symbol	Rating	Unit
Input	Power dissipation	P _o	100 mW
	Forward current	I _F	60 mA
	Reverse voltage	V _R	5 V
Output	Supply voltage	V _{CC}	7 V
	Power dissipation	P	30 mW
Operating temp. ^{*1}		T _{opr.}	0 ~ +60
Storage temp. ^{*1}		T _{stg.}	-10 ~ +80
Soldering temp. ^{*2}		T _{sol.}	240

*1.No icebound or dew

*2.For MAX.5 seconds at the position of 1mm from the resin edge

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Input	Forward voltage	I _F = 60mA		1.3	1.6	V
	Reverse current	V _R = 5V			10	μA
Output	Operating supply voltage rang	V _{CC}	4.5	5.0	5.5	V
	Low level output voltage	V _{OL}	V _{CC} = 5V, I _L = 500μA	0.1	0.4	V
	High level output voltage	V _{OH}	V _{CE} = 5V, I _F = 30mA	4		V
Transmission	Duty ratio	V _{CE} = 5V, I _F = 30mA	25	50	75	%
	DB	V _{CE} = 5V, I _F = 30mA	25	50	75	%
	Phase ^{*3}	V _{CE} = 5V, I _F = 30mA	45	90	135	deg.
	Frequency	f _{max}	V _{CC} = 5V, I _F = 30mA			20

*3.No reverse in phase difference

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