

Photointerrupters(Actuator type)

KODENSHI

SG -405

The SG -405 actuator type photointerrupter combined GaAs IRED, high sensitive phototransistor and actuator, is ideal for copiers, facsimiles.

FEATURES

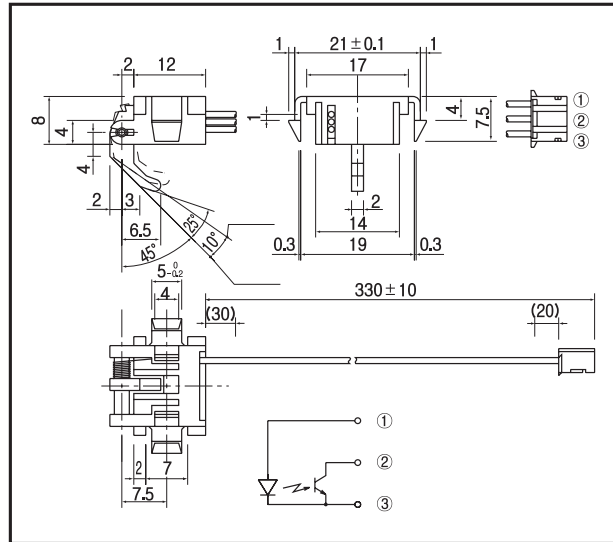
- Widely applicable
- Compact & light
- Wide choice of levers
- Connector type

APPLICATIONS

- Copiers
- Facsimiles
- Printers
- Banking machines

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25°C)

Item		Symbol	Rating	Unit
Input	Power dissipation	P _D	100	mW
	Reverse voltage	V _R	5	V
	Forward current	I _F	60	mA
	Pulse forward current ^{*1}	I _{FP}	1	A
Output	Collector power dissipation	P _C	100	mW
	Collector current	I _C	40	mA
	C -E voltage	V _{CEO}	30	V
	E -C voltage	V _{ECO}	5	V
	Operating temp. ^{*2}	T _{opr.}	-20 ~ +70	°C
Storage temp. ^{*2}	T _{stg.}	-30 ~ +85	°C	

*1. t w 100μsec. period : T=10msec.

*2. No icebound or dew

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25°C)

Item		Symbol	Conditions	Min.	Typ.	Max.	Unit.
Input	Forward voltage	V _F	I _F =30mA		1.2	1.5	V
	Reverse current	I _R	V _R =5V			10	μA
Output	Collector dark current	I _{CEO}	V _{CE} =10V		5	100	nA
	Light current	I _L	V _{CE} =5V, I _F =20mA	0.5	1.5		mA
	C -E saturation voltage	V _{CE(sat)}	I _F =20mA, I _C =0.3mA			0.4	V

MECHANICAL CHARACTERISTICS

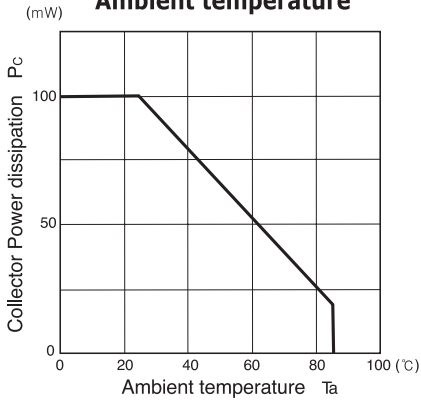
Item	Conditions	Min	Typ	Max	Unit
Static point θ1			45		deg.
Open point θ2		5	10	15	deg.
Movement torque				1.5	gf/cm
Shock endurance	packing status	Min 30G			-

Item	Conditions	Min	Typ	Max	Unit
Vibration endurance		10~55~10Hz/Min			-
		Vibration Axis 1.5mm			-
		X,Y,Z Each Direction			-
Mechanical life time		Min 10 ⁸ times			-

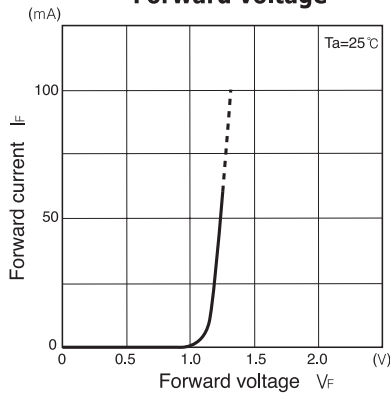
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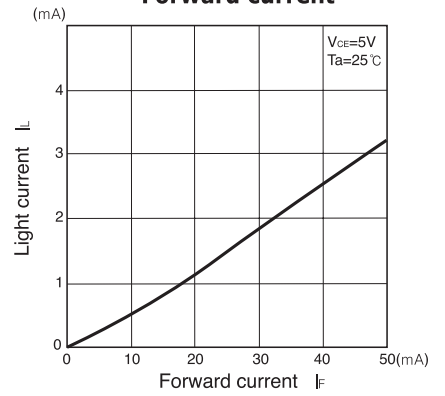
Collector power dissipation Vs. Ambient temperature



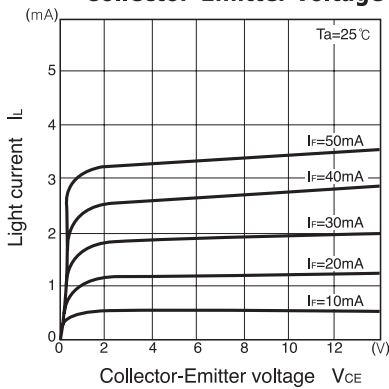
Forward current Vs. Forward voltage



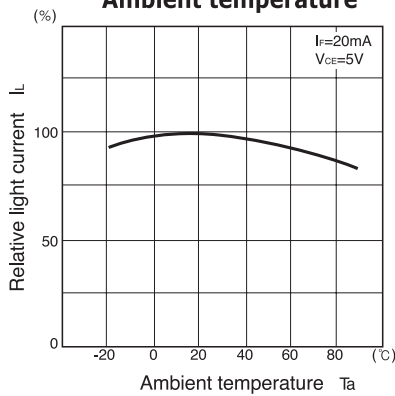
Light current Vs. Forward current



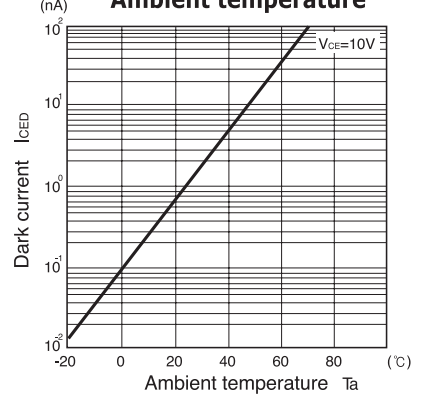
Light current Vs. Collector-Emitter voltage



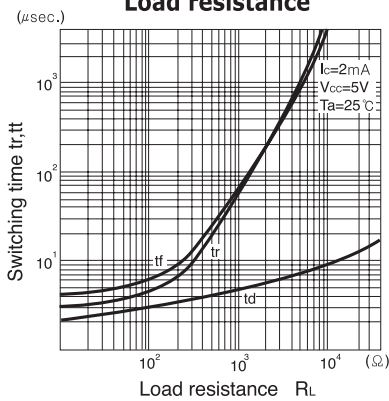
Relative light current Vs. Ambient temperature



Dark current Vs. Ambient temperature



Switching time Vs. Load resistance



Relative light current Vs. Angle

