

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

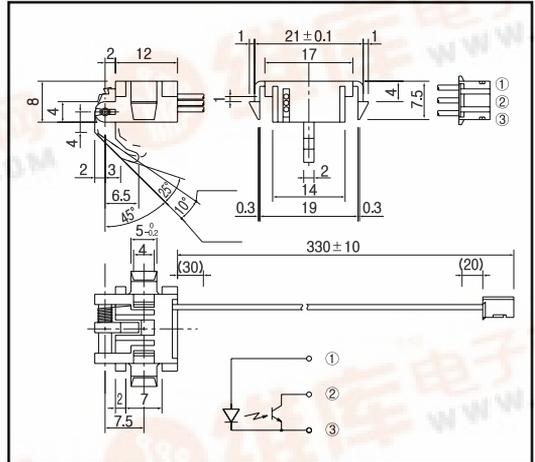
- Widely applicable
- Compact & light
- Wide choice of levers
- Connector type

APPLICATIONS

- Copiers
- Facsimiles
- Printers
- Banking machines

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25)

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	
Storage temp.*2		$T_{stg.}$	- 30 +85	

*1. t w 100µsec. period : T=10msec.

*2. No icebound or dew

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25)

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	$V_{CE}=5V, F=20mA$	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 1			45		deg.
Open point 2		5	10	15	deg.
Movement torque				1.5	gf/cm
Shock endurance	packing status	Min 30G			-

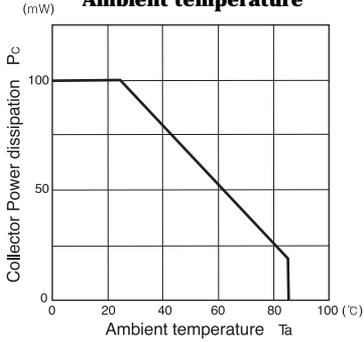
Item	Conditions	Min.	Typ.	Max.	Unit.
Vibration endurance		10~55~10Hz/Min			-
		Vibration Axis 1.5mm			-
		X,Y,Z Each Direction			-
Mechanical life time		Min 10 ⁶ times			-



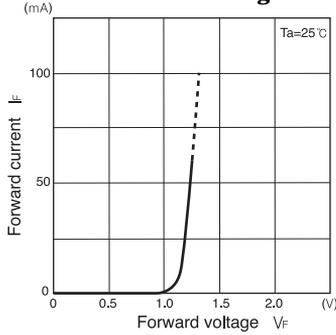
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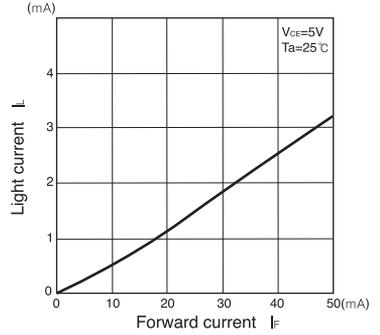
Collector power dissipation Vs. Ambient temperature



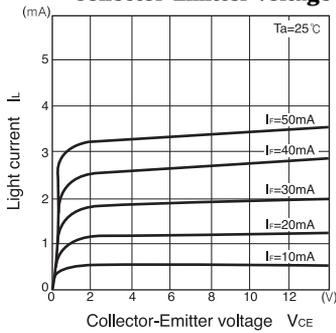
Forward current Vs. Forward voltage



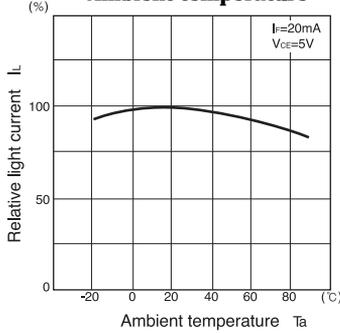
Light current Vs. Forward current



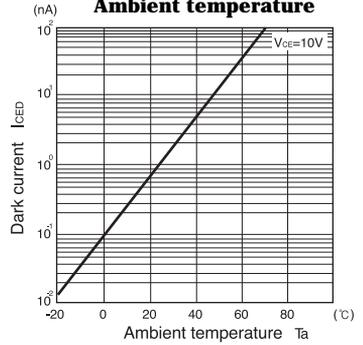
Light current Vs. Collector-Emitter voltage



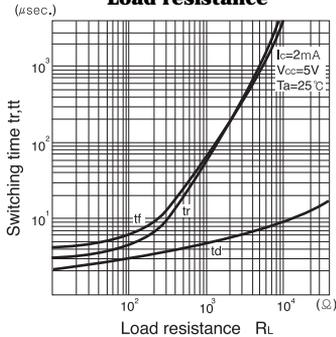
Relative light current Vs. Ambient temperature



Dark current Vs. Ambient temperature



Switching time Vs. Load resistance



Relative light current Vs. Angle

