

SG - 405

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

FEATURES

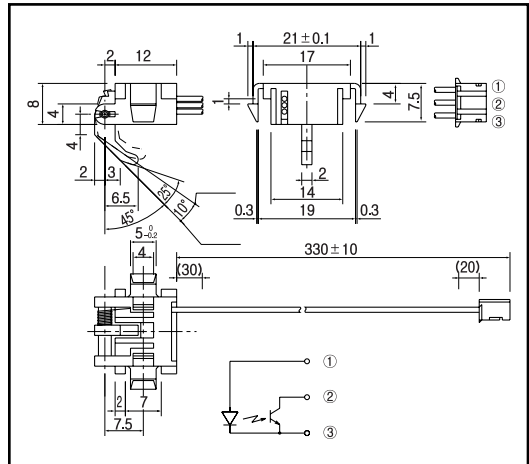
- Widely applicable
- Compact & light
- Wide choice of levers
- Connector type

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	Topr.	- 20 +70	
Storage temp. *2	Tstg.	- 30 +85		

*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			µA
Output	Collector dark current	I _{CEO}	V _{CE} =10V	5	100	nA
	High current	I _L	V _{CE} =5V, f=20mA	0.5	1.5	mA
	C - E saturation voltage	V _{CE(sat)}	I _F =20mA, I _F =0.3mA		0.4	V

MECHANICAL CHARACTERISTICS

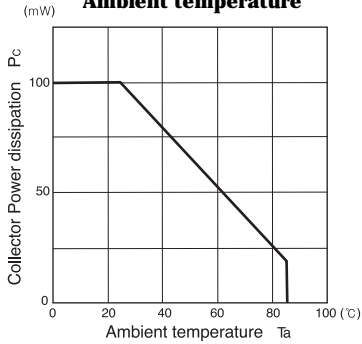
Item	Conditions	Min.	Typ.	Max.	Unit.
Static point 1			45		deg.
Open point 2		5	10	15	deg.
Movement torque			1.5		gf/cm
Shock endurance	packing status	Min 30G			-

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 ⁷ times			-

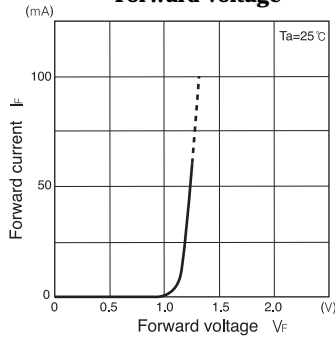
Photointerrupters(Actuator type)

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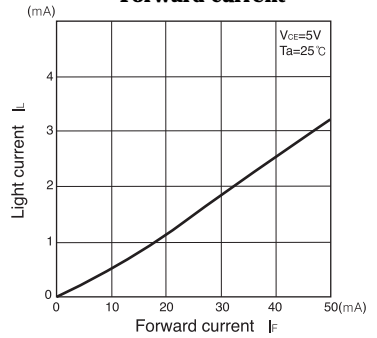
Collector power dissipation Vs. Ambient temperature



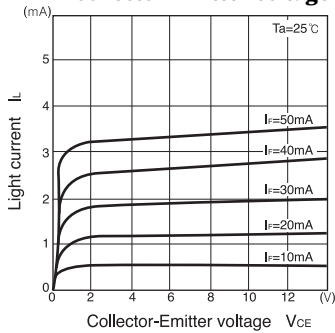
Forward current Vs. Forward voltage



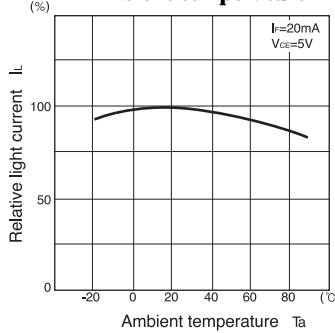
Light current Vs. Forward current



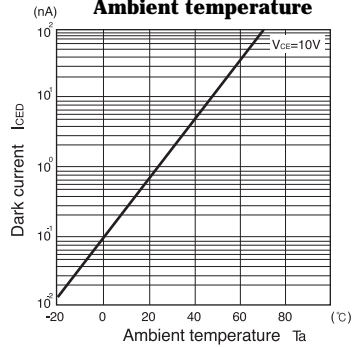
Light current Vs. Collector-Emitter voltage



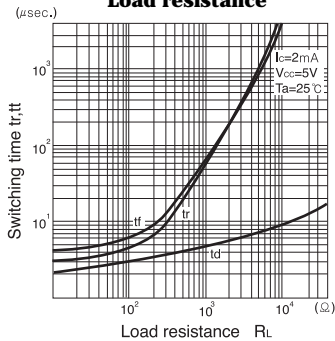
Relative light current Vs. Ambient temperature



Dark current Vs. Ambient temperature



Switching time Vs. Load resistance



Relative light current Vs. Angle

