

PHOTOINTERRUPTER



PHOTOINTERRUPTERS <Transmissive type>

(Ta=25°C)

Type	Model No.	Internal connection diagram	Features	Detecting and emitting gap (mm)	Slit width or resolution (mm)	Electro-optical characteristics						
						Current transfer ratio			Response time			
						CTR (%) MIN.	IF (mA)	VCE (V)	tr (μs) TYP.	IC (mA)	RL (Ω)	VCE (V)
Single phototransistor output	GP1S39		Subminiature, wide gap, PWB mounting type, two-phase output type	1.5	0.6*1	3.3	4	5	50	0.1	1 000	5
	GP1S47		Actuator applicable, with positioning pin, PWB mounting type	2.0	0.5	2.5	20	5	3	2	100	2
	GP1S09		Snap-in mounting type with connector	5.0	0.8	2.5	20	5	3	2	100	2
	GP1S73P		Snap-in mounting type with connector	5.0	0.5	2.5	20	5	3	2	100	2
	GP1S74P		Applicable to 3 kinds of thickness of mounting board	5.0	0.5	2.5	20	5	3	2	100	2
	GP1S93		Wide gap, subminiature, low profile (3.1 mm)	2.0	0.3	2.0	5	5	50	0.1	1 000	5
	GP1S94		Subminiature, wide gap, with positioning pin	3.5	0.3	0.8	5	5	50	0.1	1 000	5
	GP1S95		High resolution, subminiature, thin detector type	1.6	0.3	1.0	5	5	35	0.1	1 000	5
	GP1S96		Subminiature, low profile (3.5 x 2.6 x 3.1 mm)	1.0	0.3	2.0	5	5	50	0.1	1 000	5
	GP1S97		High resolution, subminiature, wide gap, with mounting hole, PWB mounting type	2.2	0.3	1.6	5	5	50	0.1	1 000	5
GP1L03			Wide gap, both-side mounting type	10.0	2.0	100	1	2	80	10	100	2
GP1L50		High resolution, both-side mounting type	3.0	0.5	50	1	2	80	2	100	2	
GP1L51		High resolution, side mounting type	3.0	0.5	50	1	2	80	2	100	2	
GP1L52V		High resolution, PWB mounting type	3.0	0.5	50	1	2	80	2	100	2	
GP1L53V		High resolution, PWB mounting type	5.0	0.5	30	1	2	80	2	100	2	
GP1L55		High resolution, PWB mounting type	2.0	0.15	30	2	2	80	2	100	2	
GP1L57		Wide gap, PWB mounting type	10.0	1.8	70	1	2	130	2	100	2	

* Topr: -25 to +85°C

*1 Reading pitch

Single phototransistor output type with actuator and 3-pin connector terminal

(Ta=25°C)

Type	Model No.	Internal connection diagram	Features	Actuator lever starting torque (Initial) MAX.	Electro-optical characteristics*1									
					Light beam interrupted					Light beam uninterrupted				
					Dissipation current		Collector current			Dissipation current		Collector current		
Icc1 (mA)	Vcc (V)	Ic1 (mA)	Vcc (V)	Vo (V)	Icc2 (mA)	Vcc (V)	Ic2 (mA)	Vcc (V)	Vo (V)					
Single phototransistor output	GP1S44S1		<ul style="list-style-type: none"> Spring lever type actuator United with connector 	1 x 10 ⁻⁴ N•m	20 MAX.	5	0.05 MAX.	5	5	20 MAX.	5	0.25 MIN.	5	5

* Topr: -25 to +75°C

*1 Operating voltage: 4.5 to 5.5 V

Internet address for Electronic Components Group
<http://www.sharp.co.jp/ecg/>

Notice

In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.