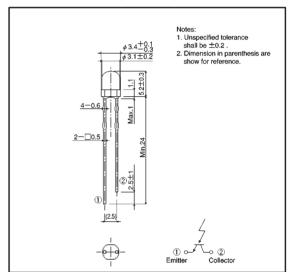
Sensors

Phototransistor, top view type RPT-38PB3F

The RPT-38PB3F is a silicon planar phototransistor. Since it is molded in plastic with a visible light filter, there is almost no effect from stray light. It is particularly suited for use with a ROHM SIR-34ST3F infrared light emitting diode.

ApplicationsOptical control equipment

- Features
- 1) High sensitivity.
- 2) Almost no effect from stray light.
- 3) Low cost plastic package.



•Absolute maximum ratings (Ta = 25° C)

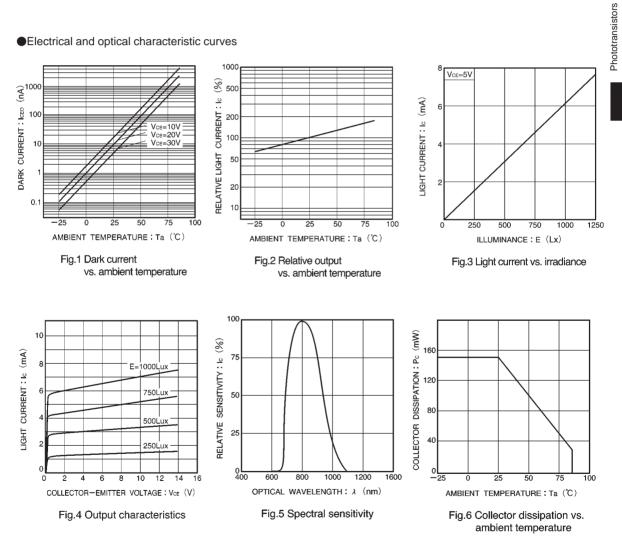
Parameter	Symbol	Limits	Unit
Collector-emitter voltage	Vceo	32	V
Emitter-collector voltage	Veco	5	V
Collector current	lc	30	mA
Collector power dissipation	Pc	150	mW
Operating temperature	Topr	-25~+85	°C
Storage temperature	Tstg	-30~+100	°C

External dimension (Units: mm)

Electrical and optical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Light current	lc	2.0	-	-	mA	Vce=5V, E=500Lx
Dark current	ICEO	_	-	0.5	μA	Vce=10V(Black box)
Peak sensitivity wavelength	λP	-	800	_	nm	—
Collector-emitter saturation voltage	VCE(sat)	-	-	0.4	V	Ic=1mA, E=500Lx
Half-angle	θ 1/2	-	±36	_	deg	—
Response time	tr∙tf	_	10	_	μs	Vcc=5V, Ic=1mA, RL=100Ω

Electrical and optical characteristic curves



ROHM

