Sensors

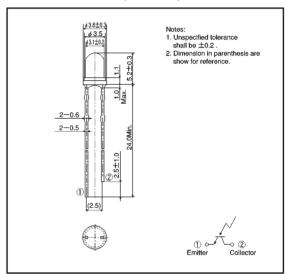
Phototransistor, top view type RPT-34PB3F

The RPT-34PB3F is a silicon planar phototransistor. It is particularly suited for use with the ROHM SIR-34ST3F infrared light emitting diode.

ApplicationsOptical control equipment

Features

- 1) High sensitivity.
- 2) 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	Ĉ
Storage temperature	Tstg	-30~+100	Ĵ

External dimensions (Units: mm)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Light current	lc	2.0	_	—	mA	V _{CE} =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 characteristics (Ta = 25° C)

Electrical and optical characteristic curves

