

Surface mount type illuminance sensor

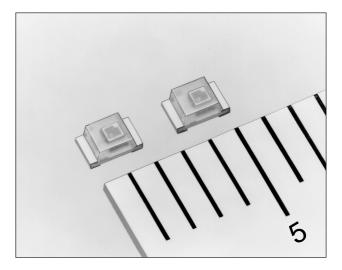
RPM-075PT

Quite new phototransistor which peak sensitivity is designed as same level as human eye.

Best sensor to detect illuminance.

(Peak sensitivity is 600nm)

Small and light weight package which can be used for reflow soldering and Pb free soldering.



Applications

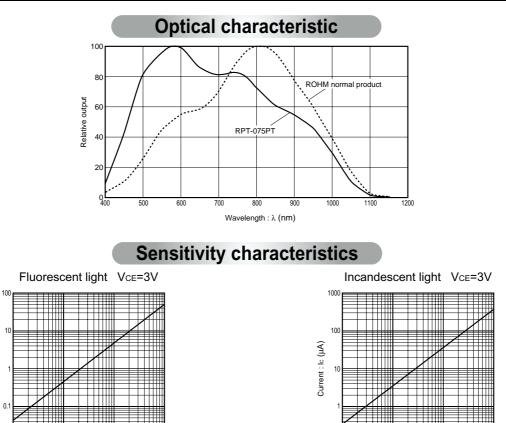
- •Control of lighting cellular phones, LCD displays, etc.
- •Control of strobe. (DSC, camcorder, etc.)

| 01 | | | |
|------|--------|---------|---|
| Cha | aracte | eristic | S |
| Unic | autu | 11000 | 0 |

- 1) Best sensor to detect illuminance. (Peak sensitivity is 600nm)
- Small (2125) and light weight package (3mg) which can be used for reflow soldering and Pb free soldering.
- 3) Linear against wide range of illuminance from 10Lx to 10000Lx.

Electrical optical characteristics

| Items | Symbol | Min. | Тур. | Max. | Unit | Conditions |
|---------------------|---------------|------|------|------|------|--------------------|
| Light current I | lc 950 | 0.25 | 0.4 | 0.6 | mA | Vce=5V, E950=500Lx |
| Dark current | ICEO | _ | _ | 0.5 | μA | Vce=10V |
| Peak sensitive wave | λP | - | 600 | - | nm | |
| Half angle | θ1/2 | _ | ±60 | _ | deg | |
| Reflective time | tr tf | _ | 10 | - | μs | Vce=3V, RL=100Ω |

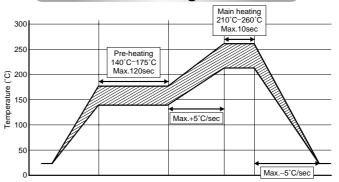


Illuminance : L (Lx)

Illuminance : L (Lx)

0.1

Reflow soldering condition



• The contents described herein are correct as of April 1, 2001

• ROHM assumes no responsibility for the use of any circuits described herein, conveys no license under any patent or other right, and makes no representations that the circuits are free from patent infringement. Specifications subject to change without notice for the purpose of improvement.

The products listed in this catalog are designed to be used with ordinary electronic equipment or devices (such as audio visual equipment, office-automation equipment, communications devices, electrical appliances and electronic toys). Should you intend to use these products with equipment or devices which require an extremely high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), please be sure to consult with our sales representative in advance.

Excellence in Electronics



Current : Ic (µA)

0

0.01

ROHM CO., LTD.

Head Office Saiin Mizosaki-cho, Ukyo-ku, Kyoto 21, Saiin Mizosaki-cho, Ukyo-ku, Kyoto 615-8585, Japan TEL:(075)311-2121 FAX:(075)315-0172 URL http://www.rohm.com

Contact us for further information about the products.

- Alpharetta, GA, U.S.A. / ROHM ELECTRONICS EASTERN SALES DIVISION. TEL:(770)754-5972 FAX:(770)754-0691 Plano, TX, U.S.A. / ROHM ELECTRONICS CENTRAL SALES DIVISION TEL:(972)312-8818 FAX:(972)312-0330
- San Diego, CA, U.S.A. / ROHM ELECTRONICS WESTERN SALES DIVISION TEL: (858)625-3630 FAX: (858)625-3670
- Germany / ROHM ELECTRONICS GMBH TEL:(2154)9210 FAX:(2154)921400
- United Kingdom / ROHM ELECTRONICS (U. K.) LIMITED TEL:(1)908-282-666 FAX:(1)908-282-528 France / ROHM ELECTRONICS (FRANCE) SA.S. TEL:(1)4123-1400 FAX:(1)4123-1430
- Hong Kong / ROHM ELECTRONICS (H. K.) CO., LTD. TEL:(2)740-6262 FAX:(2)375-8971
- Singapore / ROHM ELECTRONICS ASIA PTE. LTD. (RES DIVISION) TEL:(2)332-2322 FAX:(2)332-5662
- Taipei, Taiwan / ROHM ELECTRONICS TAIWAN CO., LTD. TEL:(2)2500-6956 FAX:(2)2503-2869
- Kaohsiung, Taiwan / KAOHSIUNG SALES OFFICE TEL:(7)225-0881 FAX:(7)225-0332
- Kuala Lumpur, Malaysia / ROHM ELECTRONICS (MALAYSIA) SDN. BHD. TEL:(3)758-7467 FAX:(3)758-8377
- nang, Malaysia / PENANG SALES OFFICE TEL:(4)228-6453 FAX:(4)228-6452
- Kora / ROM ELECTRONICS KOREA CORPORATION TEL:(2)8182-700 FAX:(2)8182-715 Philippines / ROHM ELECTRONICS (PHILIPPINES) SALES CORPORATION TEL:(2)807-6872 FAX:(2)809-1442
- Shanghai, China / ROHM ELECTRONICS (SHANGHAI) CO., LTD. TEL:(21)6440-0402 FAX:(21)6440-0405
- Beijing, China / BEIJING REPRESENTATIVE OFFICE TEL:(10)8451-2426 FAX:(10)6460-9518
- Thailand / ROHM ELECTRONICS (THAILAND) CO., LTD. TEL:(2)254-4890 FAX:(2)256-6334