

PIN Photodiode

KODENSHI

HPI - 2464 · HPI - 2464R5

The HPI - 2464, 2464R5 are silicon PIN photodiodes for automatic focusing of camera. HPI - 2464, 2464R5 have two active areas (photodiodes) integrated in one chip.

FEATURES

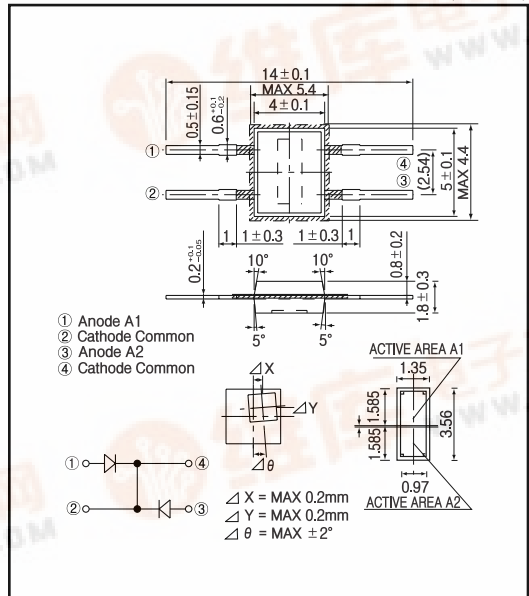
- Laser beam focusing/positioning is best performed.
- High - speed response by PIN construction.

APPLICATIONS

- Automatic focusing of camera.

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25)

| Item | Symbol | Rating | Unit |
|-------------------------------|-----------|-------------|------|
| Reverse voltage | V_R | 30 | V |
| Power dissipation | P_b | 30 | mW |
| Operating temp. | T_{opr} | - 25 ~ +85 | |
| Storage temp. | T_{stg} | - 40 ~ +100 | |
| Soldering temp. ¹⁾ | T_{sol} | 260 | |

*1.For MAX.5 seconds at the position of 2 mm from the package

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25)

| Item | Symbol | Conditions | HPI - 2464 | | | HPI - 2464R5 | | | Unit. |
|-------------------------------------|-------------|---------------------|------------|-------|------|--------------|-------|------|---------|
| | | | Min. | Typ. | Max. | Min. | Typ. | Max. | |
| Open circuit voltage | V_{oc} | $E_v = 1,000lx^2$ | | 0.35 | | | 0.35 | | V |
| Short circuit current | I_{sc} | | 10 | 17 | | 8 | 12 | | μA |
| Sensitivity | S | | | 0.5 | | 0.5 | | A/W | |
| Dark current | I_d | $V_R = 10V$ | | | 20 | | 20 | | nA |
| Curve factor | C.F. | | 0.55 | | | 0.55 | | | - |
| Capacitance | Ct | $V = 10V, f = 1MHz$ | | 10 | | | 10 | | pF |
| Temperature coefficient of V_{oc} | t | | | - 2.2 | | | - 2.2 | | mV/ |
| Temperature coefficient of I_{sc} | t | | | 0.18 | | | 0.18 | | %/ |
| Spectral sensitivity | | | 450~1,050 | | | 700~1,050 | | | nm |
| Peak wavelength | λ_p | | 900 | | | 940 | | | nm |
| Half angle | | | ± 65 | | | ± 65 | | | deg. |

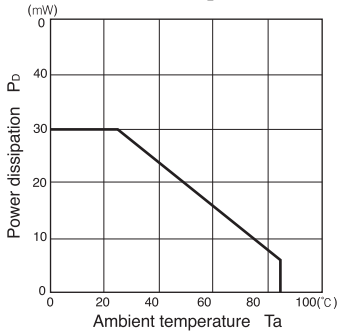
*2. Color temp. :- 2856K standard Tungsten lamp



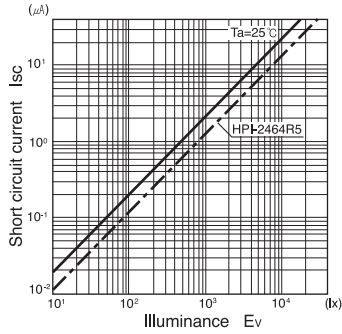
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HPI - 2464 · HPI - 2464R5

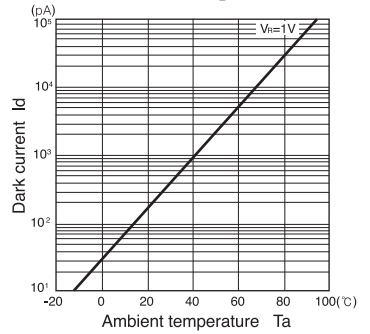
Power dissipation Vs. Ambient temperature



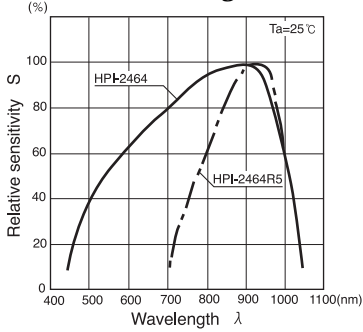
Short circuit current Vs. Illuminance



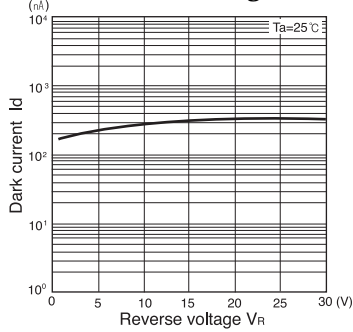
Dark current Vs. Ambient temperature



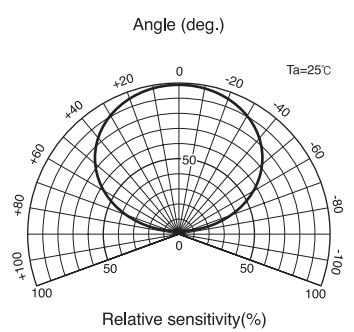
Relative sensitivity Vs. Wavelength



Dark current Vs. Reverse voltage



Radiant Pattern



Capacitance between terminals Vs. Reverse voltage

