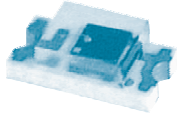
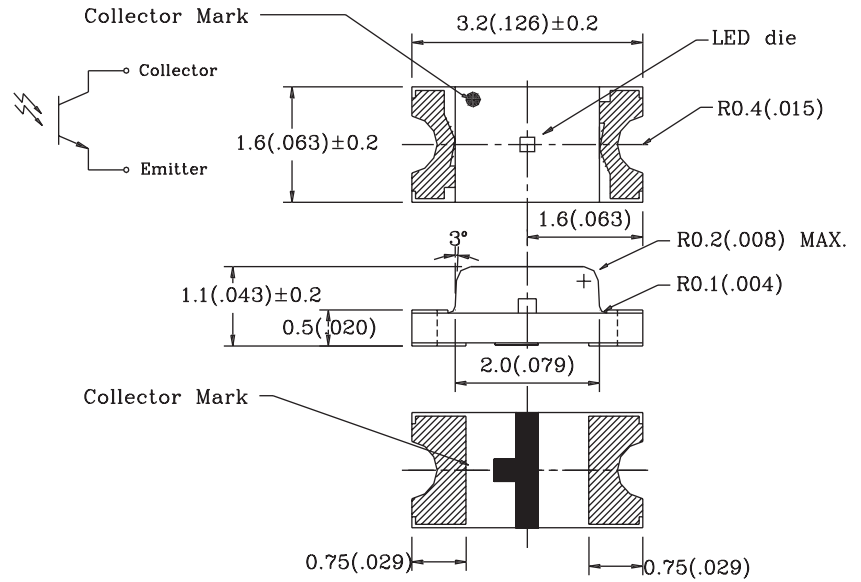




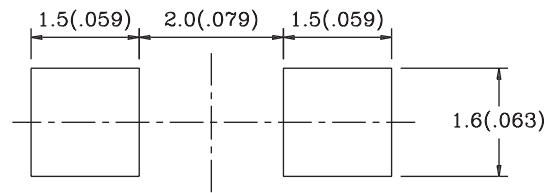
Surface Mount Photo Transistors



1206 BPT-HPx33 Series



For reflow soldering



NOTE:

- 1.All dimensions are in millimeters(inches).
- 2.Tolerance is $\pm 0.10(.004)$ unless otherwise specified.
- 3.Specifications are subject to change without notice.

Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

| | UNIT | SPEC. |
|--|------------------|-----------------------------|
| Collector-Emitter Saturation Voltage $V_{ce(sat)}$ | V | 0.5 $I_c=100\mu\text{A}$ |
| Emitter-Collector Breakdown Voltage B_{veco} | V | 5.0 $I_e=100\mu\text{A}$ |
| T_{opr} | $^\circ\text{C}$ | -25~+80 |
| T_{stg} | $^\circ\text{C}$ | -30~+85 |
| Power Dissipation | mW | 100 |

| Part No. | Parameter | | | | | | |
|-----------|----------------------|---------------------|---|------|--|--|---|
| | Spectrum Sensitivity | Peak Wavelength | Collector Light Current $V_{ce}=5\text{V}, H=1.0\text{mw}/\text{cm}^2$ | | Collector Dark Current, $V_{ce}=20\text{V}, H=1.0\text{mw}/\text{cm}^2$ | Rise/Fall Time $V_{ce}=5\text{V}, I_c=1\text{mA}$ $RL=1\text{K}\Omega$ | Viewing Angle $2\theta_{1/2}$ (deg) |
| | λ (nm) | λ_p (nm) | $I_{c(ON)}$ (mA) | | I_{cEO} (nA) | T_R/T_F (us) | |
| | | | Min. | Typ. | Max. | Typ. | Typ. |
| BPT-HP033 | 500-1000 | 940 | 0.67 | 1.50 | 100 | 15/15 | 140 |
| BPT-HP133 | 500-1000 | 940 | 2.00 | 3.00 | 100 | 15/15 | |
| BPT-HP233 | 500-1000 | 940 | 2.00 | 4.00 | 100 | 15/15 | |
| BPT-HP833 | 500-1000 | 940 | 2.00 | 5.00 | 100 | 15/15 | |