

Recommended Pickup Nozzles for Kingbright SMD LED

SMD LED Pickup Nozzle Suggestions

| Part No. | FUJI NXT Reference Tool Number | Recommended nozzle for FUJI NXT pick & place machines |
|-------------------------------------|--------------------------------------|---|
| O.5W HIGH BRIGHTNESS LED KA-3535 | R07-037-070 | \$\frac{\psi_{\tinyetini_{\psi_{\psi_{\psi_{\psi_{\psi_{\psi_{\psi_{\psi_{\pii}\psi_{\pii}\psi_{\pii}\psi_{\psi_{\psi_{\psi_{\psi_{\psi_{\psi_{\pii}\psi_{\psi_{\psi_{\psi_{\psi_{\psi_{\lemii}\lemii}\pii}\psi_{\pii}\psi_{\pii}\psi_{\pii}\psi_{\pii}\psi_{\pii}\psi_{\pii}\pii}\psi_{\pii}\psi_{\pii}\psi_{\pii}\psi_{\pii\psi_{\pii}\psi_{\pii}\pii\pii\psi_{\pii}\pii\psi_{\pii\pii\pii\pii\psi_{\pii}\pii\pii\pii\psi_{\pii}\piii\pii\pii\piii\pii\pii\psi_{\pii}\piii\ps |
| 1.5W HIGH BRIGHTNESS LED KAAF-5051 | R07-050-070 | \$ 5.0 \$ 5.0 |
| TOP-EMITTING PLCC SMD LED KA-2214 | R07-013-070 | φ 1.3 |

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| TOP-EMITTING PLCC SMD LED KA-3021 | R07-018-070 | φ1.8 |
| TOP-EMITTING PLCC SMD LED KA-3527A | R07-025-070 | φ 2.5 |
| TOP-EMITTING PLCC SMD LED KA-3528 | R07-025-070 | 7 5.5 9.4 |
| TOP-EMITTING CHIP SMD LED KPHHS-1005 | R07-007-070 | φ 0.7 |



APPLICATION NOTES FOR SMD LEDS

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| TOP-EMITTING CHIP SMD LED KPG-1608 | R07-007-070 | \$ \display \text{\$\phi \cdot 0.7} \text{\$\phi \cdot 0.7} |
| TOP-EMITTING CHIP SMD LED KPT-1608 | R07-007-070 | \$\frac{\phi}{\phi}\$0.7 |
| TOP-EMITTING CHIP SMD LED KPTD-1608 | R07-013G-070 (R07-010F-070) | Φ 1.3 |
| TOP-EMITTING CHIP SMD LED KPT-2012 | R07-010-070 | Ø 1.0 |

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| TOP-EMITTING CHIP SMD LED KPHCM-2012 | R07-010-070 | δ 1.0 φ 1.0 |
| TOP-EMITTING CHIP SMD LED KPL-3015 | R07-018-070 | Ø 1.8 |
| TOP-EMITTING CHIP SMD LED KPT-3216 | R07-013-070 | Φ 1.3 |
| TOP-EMITTING CHIP SMD LED KPTL-3216 | R07-025G-070 | φ 2.5 |



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| TOP-EMITTING CHIP SMD LED KPTD-3216 | R07-025G-070 | φ 2.5 |
| TOP-EMITTING CHIP SMD LED KPD-3223 | R07-025-070 | → 4.6 |
| TOP-EMITTING CHIP SMD LED KPED-3528 | R07-037G-070 | \$\frac{\psi_{66}}{\psi_{66}}\$\$ |
| RIGHT ANGLE SMD LED KPA-1606 | R07-010-070 | \$ 1.0 |



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| RIGHT ANGLE SMD LED KPA-2106 | R07-010-070 | φ 1.0 |
| RIGHT ANGLE SMD LED KA-2810A | R07-010-070 | Φ 1.0 |
| RIGHT ANGLE SMD LED KPA-3010 | R07-013-070 | Φ 1.3 Φ 1.3 |
| RIGHT ANGLE SMD LED KA-4040 | R07-025-070 | \$\frac{\phi}{\phi} \frac{\phi}{2.5} |



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| MULTI-COLOR SMD LED KPHB-1608 | R07-007-070 | \$6 \$0.7 |
| MULTI-COLOR SMD LED KPTB-1612 | R07-010-070 | φ 1.0 |
| MULTI-COLOR SMD LED KPTB-1615 | R07-010-070 | Φ 1.0 |
| MULTI-COLOR SMD LED KPTF-1616 | R07-010-070 | Ø 1.0 |



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| MULTI-COLOR SMD LED KPHBM-2012 | R07-010-070 | φ 1.0 |
| MULTI-COLOR SMD LED KPB-2012 | R07-010-070 | φ 1.0 |
| MULTI-COLOR SMD LED KPBA-3010 | R07-013-070 | φ 1.3 |
| MULTI-COLOR SMD LED KPFA-3010 | R07-013-070 | φ 1.3 Φ 1.3 |



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| MULTI-COLOR SMD LED KM-23 | R07-010-070 | φ 1.0 |
| MULTI-COLOR SMD LED KPBDA-3020 | R07-013-070 | Φ 1.3 Φ 1.3 |
| MULTI-COLOR SMD LED KPB-3025 | R07-013-070 | Φ 1.3 Φ 1.3 |
| MULTI-COLOR SMD LED KPBL-3025 | R07-025G-070 | φ 2.5 Φ 2.5 |



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| MULTI-COLOR SMD LED KPBD-3224 | R07-025G-070 | Φ 2.5 Φ 2.5 |
| MULTI-COLOR SMD LED) KPB-3227 | R07-018-070 | Φ1.8 |
| MULTI-COLOR SMD LED KPF-3236 | R07-018-070 | Ø 1.8 |
| MULTI-COLOR SMD LED KAAF-3529 | R07-025-070 | \$\frac{1}{4} \frac{1}{6} \frac{1}{4} \frac{1}{6} \frac |



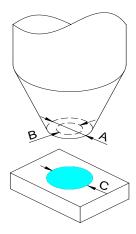
| | FUJI NXT | |
|---------------------------------|----------------|---------------------------------|
| Part No. | Reference Tool | Recommended nozzle for FUJI NXT |
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| SUBMINIATURE SMD LED KM2520-03 | R07-025G-070 | \$\frac{\phi}{2.5}\$ |
| SUBMINIATURE SMD LED | | |
| KM2520-09 | R07-018-070 | φ1.8 |
| REVERSE MOUNT SMD LED | | |
| KPTR-3216 | R07-013-070 | Φ 1.3 |
| SOT-23 SMD LED | | |
| KM-23-F | R07-010-070 | φ 1.0 |



APPLICATION NOTES FOR SMD LEDs

Notes:

- 1. If other types of pick & place machines are used, please use the appropriate tool similar to the suggested dimensions and structures for the production process.
- 2. For components with unique properties such as dome lenses, silicone lenses, and heavier parts, reduced picking speed may help prevent pickup issues and insure production stability.
- 3. To insure smooth pickup and prevent fling-out of small components such as 1005 series, please insure nozzle and feeder are well maintained to reduce vibrations and maintain picking accuracy.
- 4. The distance between the nozzle and the component may be set closer to improve pickup in older SMT machines.
- 5. For LEDs with silicone encapsulation such as the KA and KT series, the outer diameter of the pick-up nozzle must be longer than that of the LED's light emitting area. i. e. A >C, and B shall be shorter than the width of the LED.



A is the outer diameter pick-up nozzle, B is the inner diameter of pick-up nozzle, and C is the light emitting area of LED