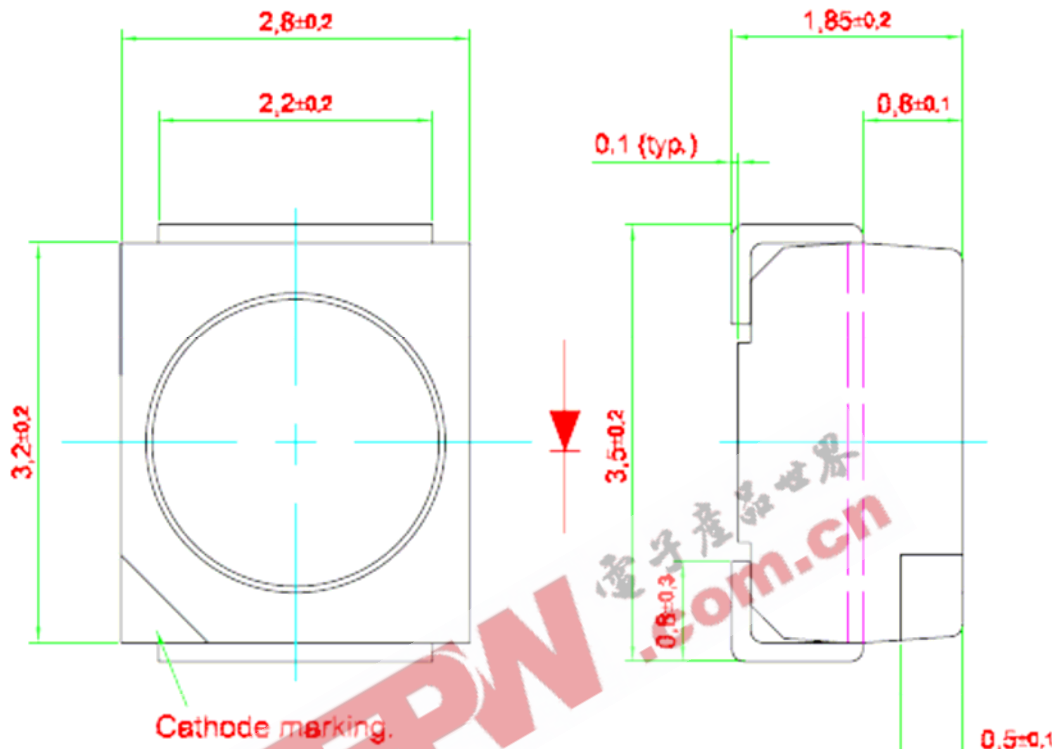


DomiLED – GaP : DDx-GJS-I1



- Low current surface mount LED.
- 120° viewing angle.
- Small package outline (LxWxH) of 3.2 x 2.8 x 1.8 mm.
- Qualified according to JEDEC moisture sensitivity Level 2.
- Compatible to both IR reflow soldering and TTW soldering.

| Part Ordering Number | Chip Technology / Color | Luminous Intensity @ If = 10mA lv (mcd) |
|--|-------------------------|--|
| DDR-GJS-J2L1-1-I1 <ul style="list-style-type: none"> • DDR-GJS-J2 • DDR-GJS-K1 • DDR-GJS-K2 • DDR-GJS-L1 | GaP / Red, 625 nm | 5.6 ... 14.0 5.6 ... 7.2 7.2 ... 9.0 9.0 ... 11.2 11.2 ... 14.0 |
| DDO-GJS-H2K1-1-I1 <ul style="list-style-type: none"> • DDO-GJS-H2 • DDO-GJS-J1 • DDO-GJS-J2 • DDO-GJS-K1 | GaP / Orange, 605 nm | 3.55 ... 9.0 3.55 ... 4.5 4.5 ... 5.6 5.6 ... 7.2 7.2 ... 9.0 |
| DDY-GJS- H2K1-1-I1 <ul style="list-style-type: none"> • DDY-GJS-H2 • DDY-GJS-J1 • DDY-GJS-J2 • DDY-GJS-K1 | GaP / Yellow, 587 nm | 3.55 ... 9.0 3.55 ... 4.5 4.5 ... 5.6 5.6 ... 7.2 7.2 ... 9.0 |
| DDG-GJS- KL2-1-I1 <ul style="list-style-type: none"> • DDG-GJS-K1 • DDG-GJS-K2 • DDG-GJS-L1 • DDG-GJS-L2 | GaP / Green, 570 nm | 7.2 ... 18.0 7.2 ... 9.0 9.0 ... 11.2 11.2 ... 14.0 14.0 ... 18.0 |
| DDP-GJS-GH2-1-I1 <ul style="list-style-type: none"> • DDP-GJS-G1 • DDP-GJS-G2 • DDP-GJS-H1 • DDP-GJS-H2 | GaP / Green, 560 nm | 1.80 ... 4.50 1.80 ... 2.24 2.24 ... 2.80 2.80 ... 3.55 3.55 ... 4.50 |

NOTE:

1. All part number above comes in a quantity of 2000 units per reel.
2. Luminous intensity is measured with an accuracy of $\pm 11\%$.
3. Wavelength binning is carried for all units as per the wavelength-binning table. Only one wavelength group is allowed for each reel.

DOMINANT Semiconductors

Characteristics.

| Forward voltage @ $I_f=10$ mA. | Chip Type | Viewing angle at 50% I_v | Max reverse current, I_R @ $V_R = 5V$. |
|-----------------------------------|-----------|-------------------------------|--|
| 2.05 V (typ.); 2.45 V (max) | GaP | 120° | 100 μA |

All forward voltages are measured using a current pulse of 1 ms and has an accuracy of ± 0.1 V.

Wavelength Grouping.

| Color | Group | Wavelength distribution (nm) |
|-----------------|-------|------------------------------|
| DDR; Red | Full | 620 – 635 |
| | W | 600 - 603 |
| | X | 603 - 606 |
| | Y | 606 - 609 |
| | Z | 609 - 612 |
| DDY; Yellow | Full | 582 – 594 |
| | W | 582 – 585 |
| | X | 585 – 588 |
| | Y | 588 - 591 |
| | Z | 591 - 594 |
| DDG; Green | Full | 564.5 – 576.5 |
| | W | 564.5 – 567.5 |
| | X | 567.5 – 570.5 |
| | Y | 570.5 – 573.5 |
| | Z | 573.5 – 576.5 |
| DDP; Pure Green | Full | 552.5 – 564.5 |
| | W | 552.5 – 555.5 |
| | X | 555.5 – 558.5 |
| | Y | 558.5 – 561.5 |
| | Z | 561.5 – 564.5 |

Dominant wavelength is measured with an accuracy of ± 1 nm.

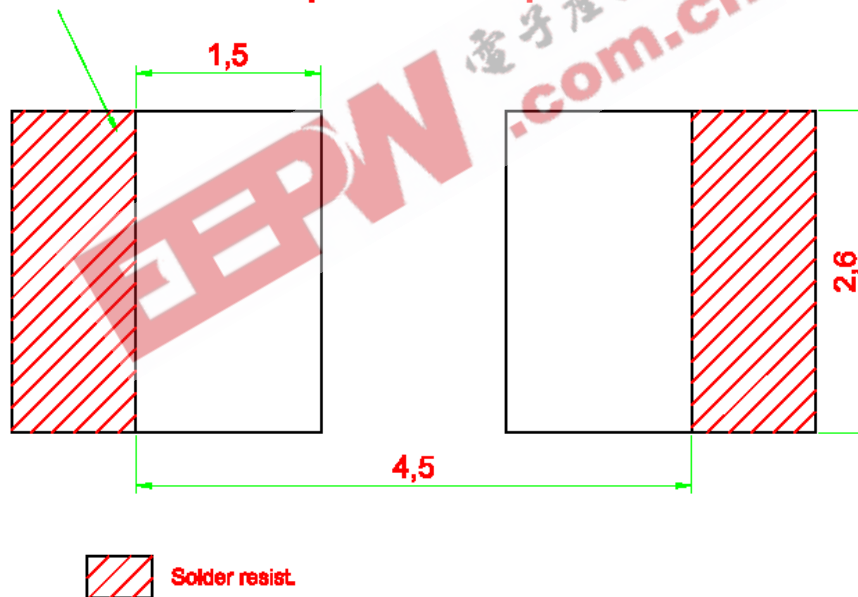
DOMINANT Semiconductors

Absolute Maximum Ratings.

| | Maximum Value | Unit |
|---|---------------|------|
| DC forward current. | 30 | mA |
| Peak pulse current; ($t_p \leq 10 \mu\text{s}$, Duty cycle = 0.005) | 500 | mA |
| Reverse voltage. | 5 | V |
| LED junction temperature. | 100 | °C |
| Operating temperature. | -40 ... +100 | °C |
| Storage temperature. | -40 ... +100 | °C |
| Power dissipation (at room temperature) | 75 | mW |

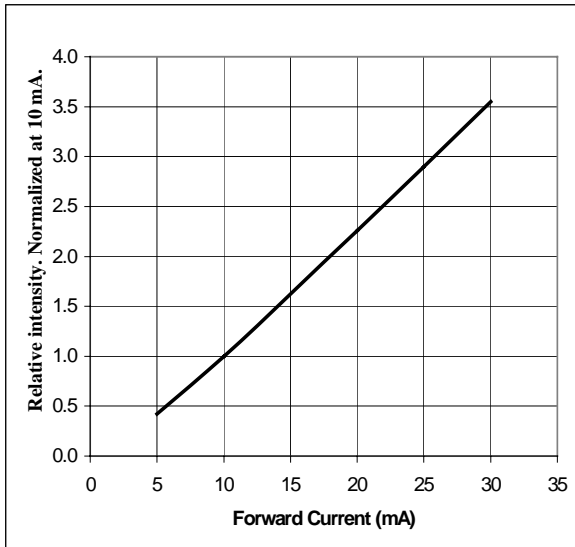
Recommended Solder Pad

Additional Cu area for improved heat dissipation.

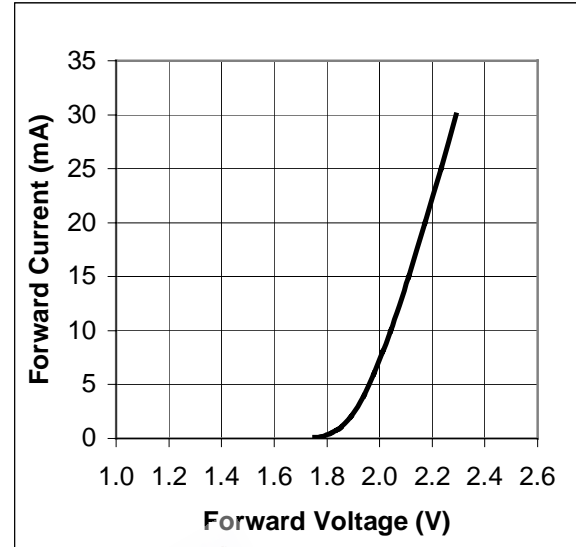


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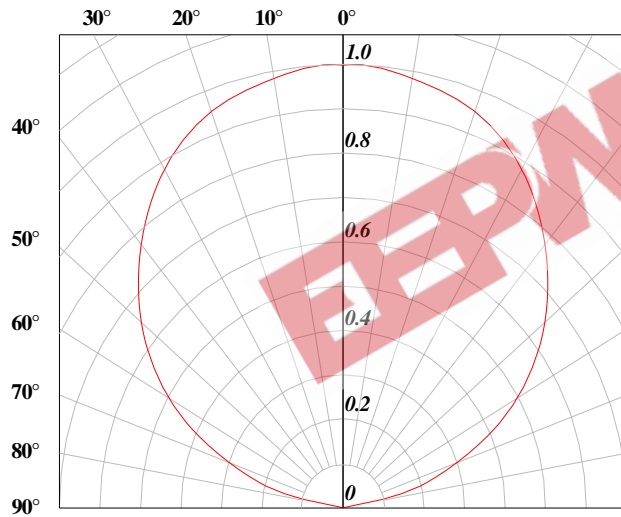
Relative luminous intensity vs. forward current.



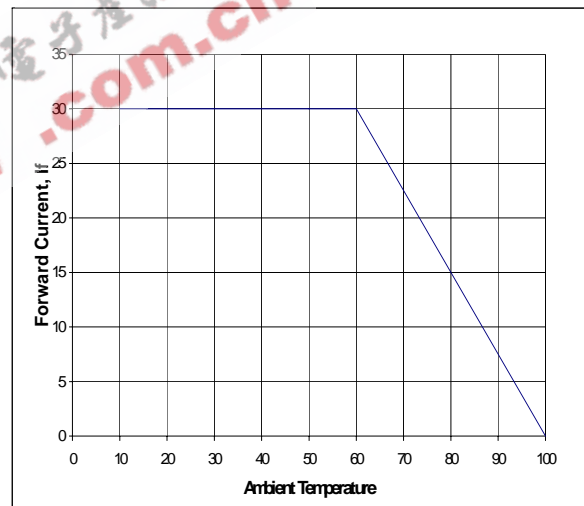
Forward current vs. forward voltage.



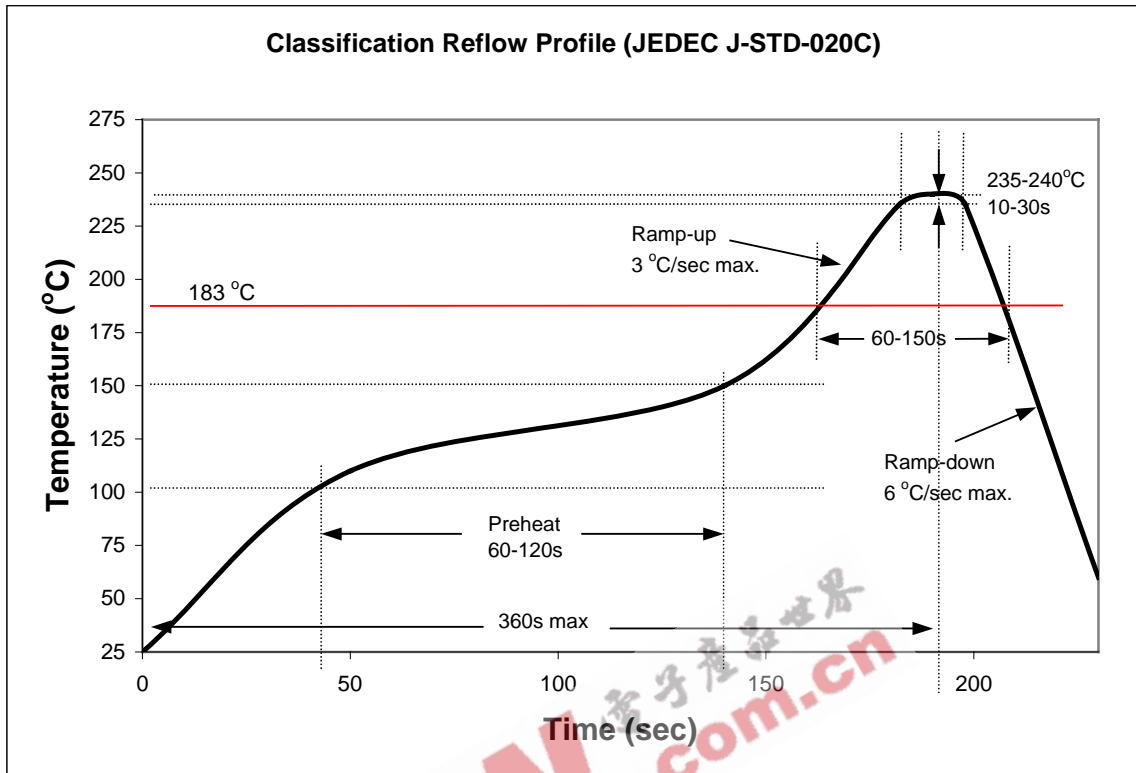
Radiation pattern.



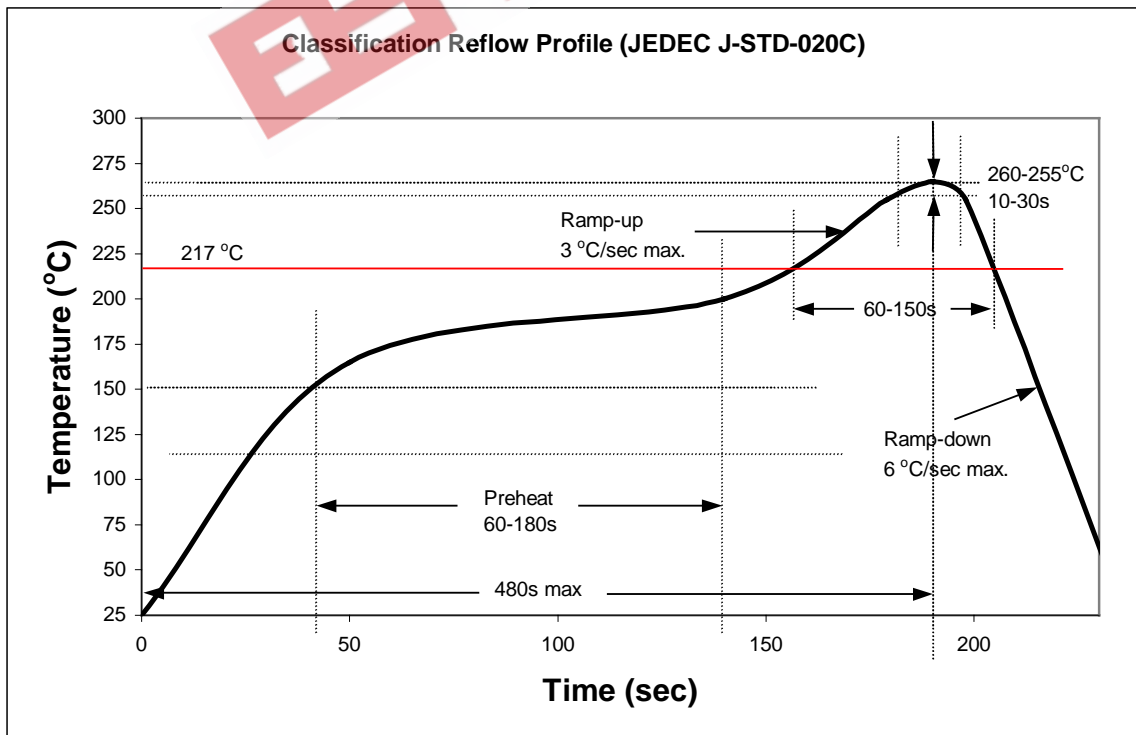
Maximum forward current vs. temperature.



Recommended Sn-Pb IR-Reflow Soldering Profile.



Recommended Pb Free IR-Reflow Soldering Profile.



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