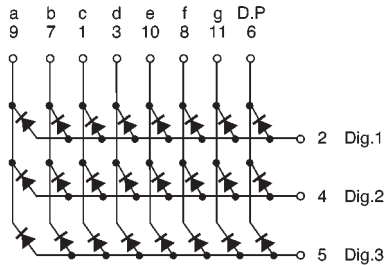


● Internal circuit schematic (example of common anode)



● Absolute maximum ratings ($T_a = 25^\circ\text{C}$)

| Parameter | Symbol | Red | Orange | Green | Unit |
|-----------------------|--------------------|---------------|---------------|---------------|------------------|
| | | LB-303VA / VK | LB-303DA / DK | LB-303MA / MK | |
| Power dissipation | P_D | 960 | 960 | 1440 | mW |
| Power dissipation | P_D / seg | 40 | 40 | 60 | mW |
| Forward current | I_F | 15 | 15 | 20 | mA |
| Peak forward current | I_{FP} | 60* | 60* | 60* | mA |
| Reverse voltage | V_R | 3 | 3 | 3 | V |
| Operating temperature | T_{opr} | -25~+75 | | | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -30~+85 | | | $^\circ\text{C}$ |

* Pulse width 1ms duty 1 / 5

● Electrical and optical characteristics ($T_a = 25^\circ\text{C}$)

| Parameter | Symbol | Conditions | Red | | | Orange | | | Green | | | Unit |
|--------------------------|-----------------|-------------------|------|------|------|--------|------|------|-------|------|------|---------------|
| | | | Min. | Typ. | Max. | Min. | Typ. | Max. | Min. | Typ. | Max. | |
| Forward voltage | V_F | $I_F=10\text{mA}$ | — | 2.0 | 2.8 | — | 2.0 | 2.8 | — | 2.1 | 2.8 | V |
| Reverse current | I_R | $V_R=3\text{V}$ | — | — | 100 | — | — | 100 | — | — | 100 | μA |
| Peak wavelength | λ_P | $I_F=10\text{mA}$ | — | 650 | — | — | 610 | — | — | 563 | — | nm |
| Spectral line half width | $\Delta\lambda$ | $I_F=10\text{mA}$ | — | 40 | — | — | 40 | — | — | 40 | — | nm |

⊙ Not designed for radiation resistance.

● Luminous intensity

| Color | λ_P | Type | Min. | Typ. | Max. | Unit |
|--------|-------------|----------|------|------|------|------|
| Red | 650 | LB-303VA | 1.4 | 4.0 | — | mcd |
| | | LB-303VK | | | | |
| Orange | 610 | LB-303DA | 1.4 | 4.0 | — | mcd |
| | | LB-303DK | | | | |
| Green | 563 | LB-303MA | 2.2 | 6.3 | — | mcd |
| | | LB-303MK | | | | |

Note: Measured at $I_F = 10\text{mA}$