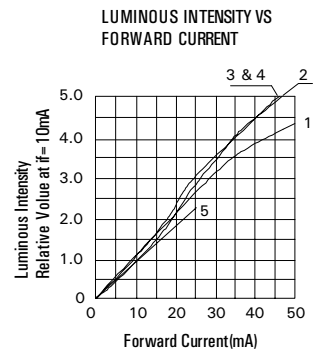
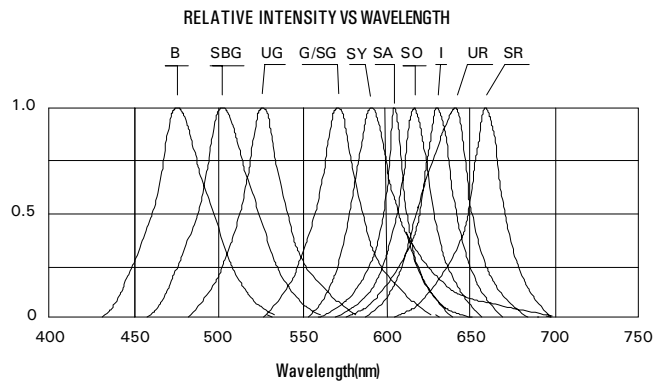
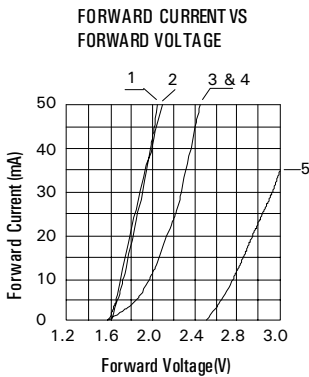


| PART NO. | | | KLB10 I | KLB10 SR | KLB10 G | KLB10 SG | KLB10 SY | KLB10 SA | KLB10 UR | KLB10 SO | KLB10 B/UB | KLB10 BG | KLB10 UG | KLB10 W | | |
|---|--|--|------------------------|-----------------|---------|--------------|-------------|----------------|-----------------|----------------|--------------|-----------------|-----------|---------------|----------------|---------|
| OPERATING CHARACTERISTICS AT 25°C (Bigger Display may have more than one LED chip per segment) | | | UNITS | SYMBOL | IRE D I | SUPER RED SR | GREEN G | SUPER GREEN SG | SUPER YELLOW SY | SUPER AMBER SA | ULTRA RED UR | SUPER ORANGE SO | BLUE B/UB | BLUE GREEN BG | ULTRA GREEN UG | WHITE W |
| Semiconductor Composition | | | | | AlGaAs | | GaP/AlInGaP | | AllnGaP | | | SiC / GalnN | | | | |
| Forward Voltage - Typical @ 10mA | | | V | V _F | 2.10 | 1.90 | 2.20 | 2.20 | 2.10 | 2.10 | 1.90 | 1.90 | 3.50 | 3.50 | 3.50 | 3.50 |
| Forward Voltage - Maximum @ 20 mA | | | V | V _{FM} | 2.40 | 2.10 | 2.60 | 2.40 | 2.40 | 2.40 | 2.10 | 2.40 | 4.50 | 4.50 | 4.50 | 4.50 |
| Reverse Current @ V _R = 5V | | | μA | I _R | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Peak Emission Wavelength | | | nm | λ _p | 630 | 660 | 568 | 568 | 590 | 610 | 645 | 620 | 470 | 502 | 525 | --- |
| Emission Wavelength Half Width | | | nm | Δλ | 35 | 20 | 30 | 15 | 15 | 15 | 20 | 20 | 25 | 30 | 35 | --- |
| Luminous Intensity per Segment | | | μcd | I _v | 3500 | 6000 | 4000 | 6000 | 7000 | 7500 | 13000 | 13000 | 6000 | 7000 | 17000 | --- |
| ABSOLUTE MAXIMUM RATINGS AT 25°C | | | | | | | | | | | | | | | | |
| Reverse Voltage | | | V | V _R | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Forward Current (avg) | | | mA | I _F | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Peak Forward Current (T<1μs) | | | mA | I _{FS} | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| Operating / Storage Temperature Range | | | -10° C to + 85° C | | | | | | | | | | | | | |
| Lead Soldering Temperature | | | < 260° C for 5 Seconds | | | | | | | | | | | | | |
| Series Resistor to be used per segment : 300 Ohms @ 5V Supply (OR) 50 to 100 Ohms @ 3V Supply | | | | | | | | | | | | | | | | |

ELECTRICAL CHARACTERISTIC CURVES



1. AlGaAs : I, SR

2. GaP : G

3 & 4. AllnGaP : SG, SY, SA, UR, SO

5. GalnN : B, BG, UG, W

KPC/KLB10X

Rev. 00

1-1-04



KWALITY PHOTONICS PRIVATE LIMITED

29, EC Kushaiguda, Hyderabad-500 062, INDIA. Ph : 91-040-27123555, 27136252 Fax : 91-040-27124762
Email : kwality@kwalityindia.com www.kwalityindia.com