

|             |      |       |
|-------------|------|-------|
| Face Length | MM   | 34.0  |
| Face Width  | MM   | 24.4  |
| Height      | MM   | 10.5  |
| Pin Spacing | MM   | 2.54  |
| Row SPacing | MM   | 15.24 |
| No.of pins  | Pins | 14    |

Note : All Dimensions are in mm Tolerance ± 0.2 mm

| PART NO.  | Common Anode   | CA |                        |                  |          |              |           |                |                 |                |              |                 |           |               |                |         |
|---|----------------|----|------------------------|------------------|----------|--------------|-----------|----------------|-----------------|----------------|--------------|-----------------|-----------|---------------|----------------|---------|
|   | Common Cathode | CC |                        |                  |          |              |           |                |                 |                |              |                 |           |               |                |         |
|   |                |    | KLS105 I               | KLS105 SR        | KLS105 G | KLS105 SG    | KLS105 SY | KLS105 SA      | KLS105 UR       | KLS105 SO      | KLS105 B/UB  | KLS105 BG       | KLS105 UG | KLS105 W      |                |         |
|   |                |    | KLS106 I               | KLS106 SR        | KLS106 G | KLS106 SG    | KLS106 SY | KLS106 SA      | KLS106 UR       | KLS106 SO      | KLS106 B/UB  | KLS106 BG       | KLS106 UG | KLS106 W      |                |         |
| OPERATING CHARACTERISTICS AT 25°C<br>(Bigger Display may have more than one LED chip per segment) |                |    | UNITS                  | SYMBOL           | RED 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 / GaInN   |                |         |
| Forward Voltage - Typical @ 10mA  |                |    | V                      | V <sub>F</sub>   | 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 <sub>FM</sub>  | 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 <sub>R</sub> = 5V   |                |    | mA                     | I <sub>R</sub>   | 100      | 100          | 100       | 100            | 100             | 100            | 100          | 100             | 100       | 100           | 100            | 100     |
| Peak Emission Wavelength  |                |    | nm                     | λ <sub>p</sub>   | 630      | 660          | 568       | 568            | 590             | 610            | 645          | 620             | 470       | 502           | 525            | ---     |
| Emission Wavelength Half Width  |                |    | nm                     | D <sub>1/2</sub> | 35       | 20           | 30        | 15             | 15              | 15             | 20           | 20              | 25        | 30            | 35             | ---     |
| Luminous Intensity per Segment  |                |    | mcd                    | I <sub>v</sub>   | 3500     | 6000         | 4000      | 6000           | 7000            | 7500           | 13000        | 13000           | 6000      | 7000          | 17000          | ---     |
| ABSOLUTE MAXIMUM RATINGS AT 25°C  |                |    | V                      | V <sub>R</sub>   | 5        | 5            | 5         | 5              | 5               | 5              | 5            | 5               | 5         | 5             | 5              | 5       |
| Reverse Voltage   |                |    | mA                     | I <sub>F</sub>   | 20       | 20           | 20        | 20             | 20              | 20             | 20           | 20              | 20        | 20            | 20             | 20      |
| Forward Current (avg)   |                |    | mA                     | I <sub>FS</sub>  | 80       | 80           | 80        | 80             | 80              | 80             | 80           | 80              | 80        | 80            | 80             | 80      |
| Peak Forward Current (T<1ms)  |                |    |                        |                  |          |              |           |                |                 |                |              |                 |           |               |                |         |
| 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

