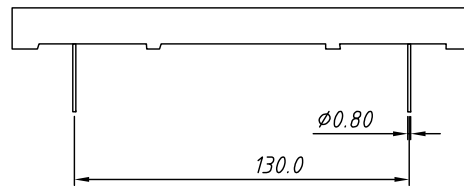
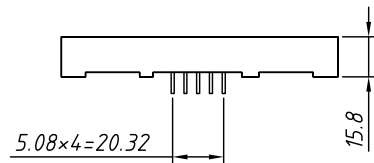
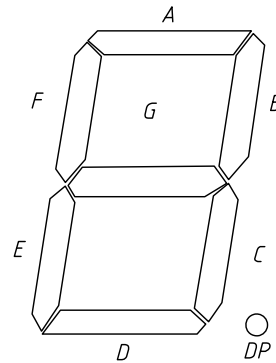
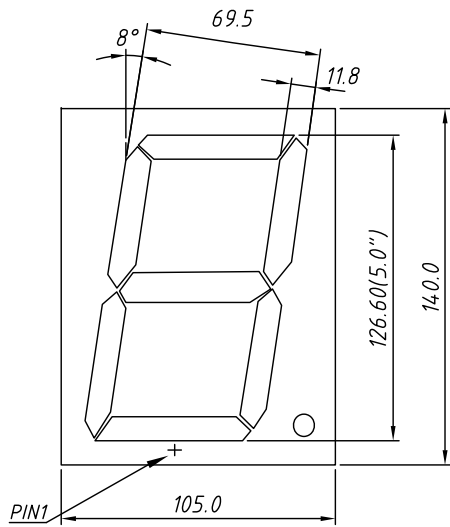
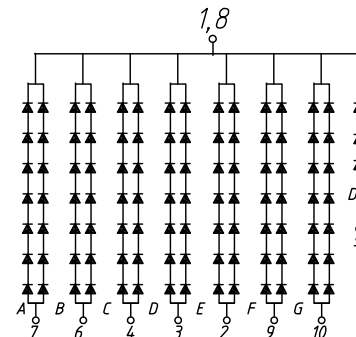


PACKAGE DIMENSION mm

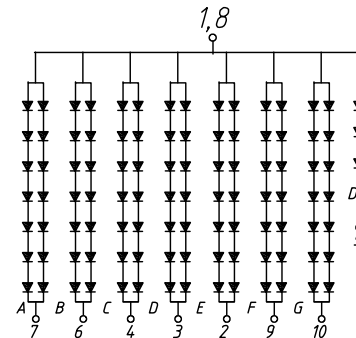


INTERNAL CIRCUIT DIAGRAM

Common Cathode  
L-KLS9-D-50012 Ax



Common Anode  
L-KLS9-D-50012 Bx

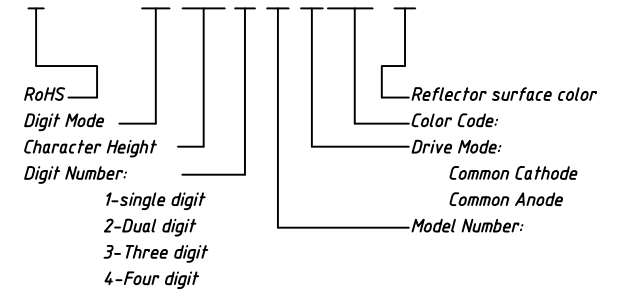


| Color Code | Emitting Color | Peak Wavelength | Forward Voltage $V_F$ /Seg. |      | Luminous Intensity $I_V$ /Seg. |      |
|------------|----------------|-----------------|-----------------------------|------|--------------------------------|------|
|            |                |                 | Typ.                        | Max. | Min.                           | Typ. |
|            |                | nm              | V                           |      | mcd                            |      |
| UHR        | Ultra Red      | 640             | 2                           | 2.5  | 40                             | 60   |
| UE         | Orange         | 615             | 2                           | 2.5  | 40                             | 60   |
| H          | Red            | 623             | 2.25                        | 2.5  | 0.4                            | 0.8  |
| YO         | Amber          | 605             | 2                           | 2.5  | 40                             | 60   |
| UY         | Yellow         | 590             | 2                           | 2.5  | 40                             | 60   |
| UG         | Green          | 568             | 2.1                         | 2.5  | 25                             | 40   |
| PG         | Pure Green     | 525             | 3.3                         | 3.8  | 150                            | 200  |
| UB         | Blue           | 465             | 3.3                         | 3.8  | 40                             | 100  |
| UW         | White          |                 | 3.3                         | 3.8  | 200                            | 500  |

Electro/Optical Characteristics  $I_F=20mA$   $T_a=25^\circ C$

Order information

L-KLS9-D-500 1 2 A XX -X X

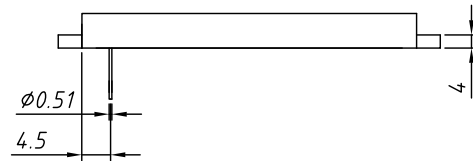
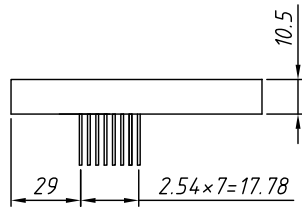
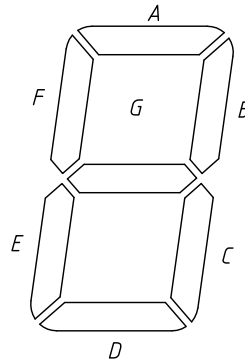
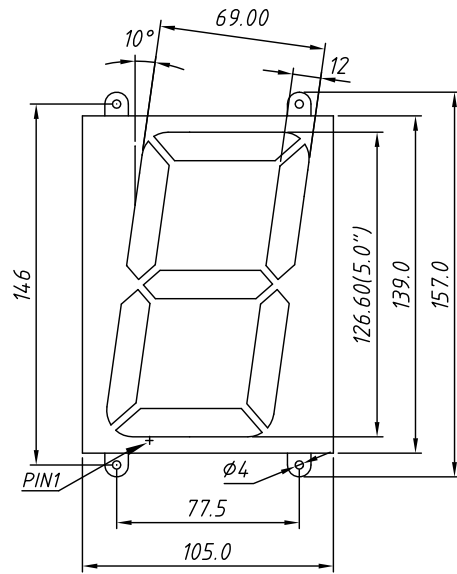


Maximum Ratings  $T_a=25^\circ C$  (Derate above  $25^\circ C$ )

| Characteristic                 | Test Condition                       | Symbol   | Units | Ultra Red | Orange | Red  | Amber | Yellow | Green | Pure Green | Blue  | White |
|--------------------------------|--------------------------------------|----------|-------|-----------|--------|------|-------|--------|-------|------------|-------|-------|
|                                |                                      |          |       | UHR       | UE     | H    | YO    | UY     | UG    | PG         | UB    | UW    |
| Pulse Forward Current Per Seg. | 1/10 duty cycle<br>0.1ms Pulse width | $I_{FP}$ | mA    | 100       | 100    | 50   | 100   | 100    | 100   | 100        | 100   | 100   |
| DC Forward Current Per Seg.    |                                      | $I_F$    | mA    | 30        | 30     | 15   | 30    | 30     | 30    | 30         | 30    | 30    |
| Reverse Current Per Seg.       | $V_R=5V$                             | $I_R$    | A     | 10        | 10     | 10   | 10    | 10     | 10    | 10         | 10    | 10    |
| Power Dissipation              |                                      | $P_D$    | mW    | 65x8      | 65x8   | 40x8 | 65x8  | 65x8   | 75x8  | 110x8      | 120x8 | 120x8 |

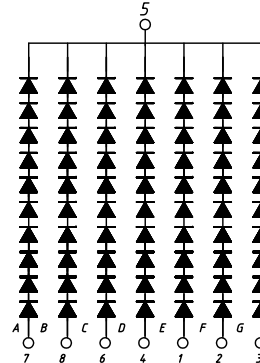
|            |                               |              |   |
|------------|-------------------------------|--------------|---|
| Tolerance: | $\pm 0.25mm$<br>unless stated | Description: | 5.0" Single Digit<br>7 Segment DISPLAYS |
| PROJECTION |                               | KLS P/N:     | L-KLS9-D-50012XXXXX                     |
| UNITS      | mm                            |              |   |
| SHEET SIZE | A4                            |              |   |
| Draw data  | 2018-1-25                     |              | NingBo KLS ELECTRONIC CO.,L TD.         |
| Check data | 2018-1-25                     |              |   |

PACKAGE DIMENSION mm

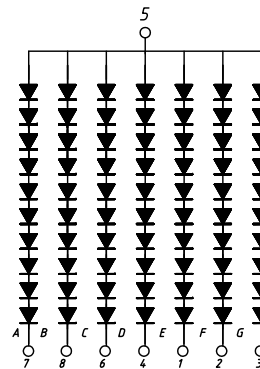


INTERNAL CIRCUIT DIAGRAM

Common Cathode  
L-KLS9-D-50012 Cx



Common Anode  
L-KLS9-D-50012 Dx

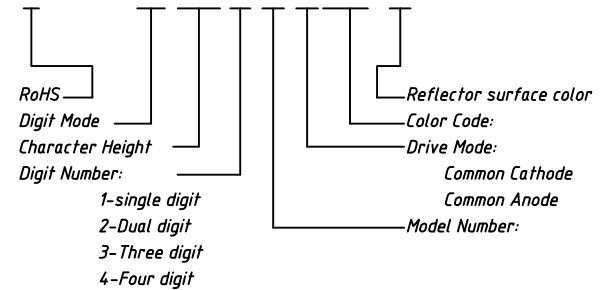


| Color Code | Emitting Color | Peak Wavelength | Forward Voltage $V_F$ /Seg. |      | Luminous Intensity $I_V$ /Seg. |      |
|------------|----------------|-----------------|-----------------------------|------|--------------------------------|------|
|            |                |                 | Typ.                        | Max. | Min.                           | Typ. |
|            |                | nm              | V                           |      | mcd                            |      |
| UHR        | Ultra Red      | 640             | 2                           | 2.5  | 40                             | 60   |
| UE         | Orange         | 615             | 2                           | 2.5  | 40                             | 60   |
| H          | Red            | 623             | 2.25                        | 2.5  | 0.4                            | 0.8  |
| YO         | Amber          | 605             | 2                           | 2.5  | 40                             | 60   |
| UY         | Yellow         | 590             | 2                           | 2.5  | 40                             | 60   |
| UG         | Green          | 568             | 2.1                         | 2.5  | 25                             | 40   |
| PG         | Pure Green     | 525             | 3.3                         | 3.8  | 150                            | 200  |
| UB         | Blue           | 465             | 3.3                         | 3.8  | 40                             | 100  |
| UW         | White          |                 | 3.3                         | 3.8  | 200                            | 500  |

Electro/Optical Characteristics  $I_F=20mA$   $T_a=25^\circ C$

Order information

L-KLS9-D-500 1 2 C XX -X X



Maximum Ratings  $T_a=25^\circ C$  (Derate above  $25^\circ C$ )

| Characteristic                 | Test Condition                       | Symbol   | Units | Ultra Red | Orange | Red  | Amber | Yellow | Green | Pure Green | Blue  | White |
|--------------------------------|--------------------------------------|----------|-------|-----------|--------|------|-------|--------|-------|------------|-------|-------|
|                                |                                      |          |       | UHR       | UE     | H    | YO    | UY     | UG    | PG         | UB    | UW    |
| Pulse Forward Current Per Seg. | 1/10 duty cycle<br>0.1ms Pulse width | $I_{FP}$ | mA    | 100       | 100    | 50   | 100   | 100    | 100   | 100        | 100   | 100   |
| DC Forward Current Per Seg.    |                                      | $I_F$    | mA    | 30        | 30     | 15   | 30    | 30     | 30    | 30         | 30    | 30    |
| Reverse Current Per Seg.       | $V_R=5V$                             | $I_R$    | A     | 10        | 10     | 10   | 10    | 10     | 10    | 10         | 10    | 10    |
| Power Dissipation              |                                      | $P_D$    | mW    | 65x8      | 65x8   | 40x8 | 65x8  | 65x8   | 75x8  | 110x8      | 120x8 | 120x8 |

|            |                               |                                |   |
|------------|-------------------------------|--------------------------------|---|
| Tolerance: | $\pm 0.25mm$<br>unless stated | Description:                   | 5.0" Single Digit<br>7 Segment DISPLAYS |
| PROJECTION |                               | KLS P/N:                       | L-KLS9-D-50012XXXXXX                    |
| UNITS      | mm                            | NingBo KLS ELECTRONIC CO.,LTD. |   |
| SHEET SIZE | A4                            |                                |   |
| Draw data  | 2018-1-25                     |                                |   |
| Check data | 2018-1-25                     |                                |   |