



## LED DISPLAYS:ELS-12101A/B SERIES

### ELECTRICAL AND OPTICAL CHARACTERISTICS (Ta=25℃)

| Part No.     | Emitted Color | Peak Wave Length | Epoxy Color | Surface Color | Common Electrode | $\Delta\lambda$ (nm) | If (mA) | Peak (mA) | Vf(V)   |         | IV(mcd) |     |
|--------------|---------------|------------------|-------------|---------------|------------------|----------------------|---------|-----------|---------|---------|---------|-----|
|              |               |                  |             |               |                  |                      |         |           | Segment | Dot     | Min     | Max |
| ELS-12101AS  | Red           | 620-630          | White       | Black         | Cathode          | 10                   | 20      | 60        | 3.6-4.0 | 1.8-2.0 | 82      | 92  |
| ELS-12101AO  | Orange        | 600-610          | White       | Black         | Cathode          | 10                   | 20      | 60        | 3.6-4.0 | 1.8-2.0 | 85      | 95  |
| ELS-12101AY  | Yellow        | 585-595          | White       | Black         | Cathode          | 10                   | 20      | 60        | 3.6-4.0 | 1.8-2.0 | 88      | 98  |
| ELS-12101AG  | Olivine       | 565-575          | White       | Black         | Cathode          | 10                   | 20      | 60        | 3.6-4.0 | 1.8-2.0 | 10      | 20  |
| ELS-12101AGG | Emerald       | 515-525          | White       | Black         | Cathode          | 10                   | 20      | 60        | 5.2-5.6 | 2.6-2.8 | 215     | 225 |
| ELS-12101AB  | Blue          | 460-470          | White       | Black         | Cathode          | 10                   | 20      | 60        | 5.2-5.6 | 2.6-2.8 | 15      | 25  |
| ELS-12101AW  | White         | -                | -           | Black         | Cathode          | -                    | 20      | 60        | 5.2-5.6 | 2.6-2.8 | -       | -   |
| ELS-12101BS  | Red           | 620-630          | White       | Black         | Anode            | 10                   | 20      | 60        | 3.6-4.0 | 1.8-2.0 | 82      | 92  |
| ELS-12101BO  | Orange        | 600-610          | White       | Black         | Anode            | 10                   | 20      | 60        | 3.6-4.0 | 1.8-2.0 | 85      | 95  |
| ELS-12101BY  | Yellow        | 585-595          | White       | Black         | Anode            | 10                   | 20      | 60        | 3.6-4.0 | 1.8-2.0 | 88      | 98  |
| ELS-12101BG  | Olivine       | 565-575          | White       | Black         | Anode            | 10                   | 20      | 60        | 3.6-4.0 | 1.8-2.0 | 10      | 20  |
| ELS-12101BGG | Emerald       | 515-525          | White       | Black         | Anode            | 10                   | 20      | 60        | 5.2-5.6 | 2.6-2.8 | 215     | 225 |
| ELS-12101BB  | Blue          | 460-470          | White       | Black         | Anode            | 10                   | 20      | 60        | 5.2-5.6 | 2.6-2.8 | 15      | 25  |
| ELS-12101BW  | White         | -                | -           | Black         | Anode            | -                    | 20      | 60        | 5.2-5.6 | 2.6-2.8 | -       | -   |

### ABSOLUTE MAXIMUM RATINGS (Ta=25℃)

| Reverse Voltage | Reverse Current (V <sub>R</sub> =5V) | Operating Temperature Range | Storage Temperature Range | Lead Soldering Temperature |
|-----------------|--------------------------------------|-----------------------------|---------------------------|----------------------------|
| 5V              | 20 $\mu$ A                           | -20℃~+80℃                   | -30℃~+80℃                 | 255℃ For 3 seconds         |

### PACKAGE DIMENSION (Unit: millimeters, Tolerance : $\pm 0.25$ mm)

