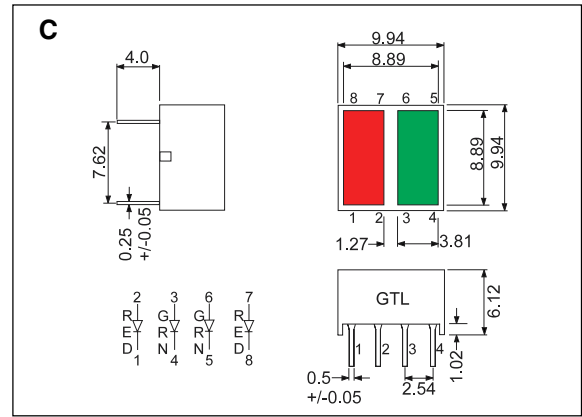
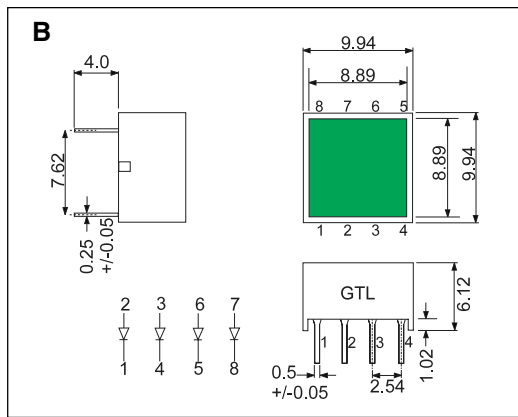


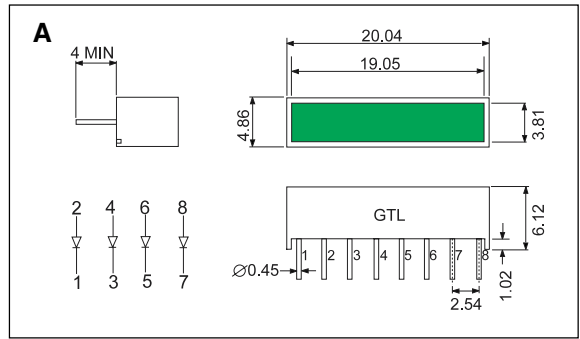
## Light Bar (8.89mm x 3.81mm)

|                      | Line No. | Part No. | Lens           | Luminous Intensity at 20mA |         | Forward Voltage at 20mA |         | Peak Wave Length at 20mA | Drawing |
|----------------------|----------|----------|----------------|----------------------------|---------|-------------------------|---------|--------------------------|---------|
|                      |          |          |                | Minimum                    | Maximum | Typical                 | Maximum |                          |         |
| ● ULTRA BRIGHT RED   | 1        | E2010    | Diffused White | 15.0mcd                    | 40.0mcd | 1.85V                   | 2.5V    | 660nm                    | A       |
| ● SUPER BRIGHT GREEN | 2        | E2011    | Diffused White | 10.0mcd                    | 25.0mcd | 2.2V                    | 2.5V    | 565nm                    | A       |



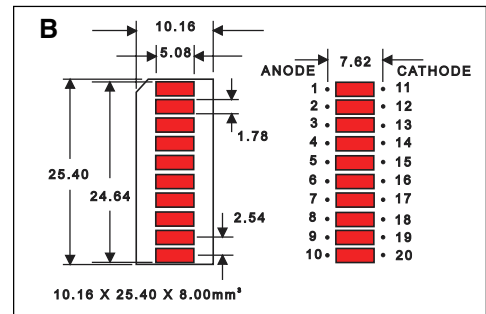
## Light Bar (8.89mm x 8.89mm)

|                      | Line No. | Part No. | Lens           | Luminous Intensity at 20mA |                    | Forward Voltage at 20mA |              | Peak Wave Length at 20mA | Drawing |
|----------------------|----------|----------|----------------|----------------------------|--------------------|-------------------------|--------------|--------------------------|---------|
|                      |          |          |                | Minimum                    | Maximum            | Typical                 | Maximum      |                          |         |
| ● ULTRA BRIGHT RED   | 3        | E2040    | Diffused White | 30.0mcd                    | 80.0mcd            | 1.85V                   | 2.5V         | 660nm                    | B       |
| ● SUPER BRIGHT GREEN | 4        | E2041    | Diffused White | 20.0mcd                    | 50.0mcd            | 2.2V                    | 2.5V         | 565nm                    | B       |
| ● RED & GREEN        | 5        | E2020    | Diffused White | 15.0mcd<br>10.0mcd         | 40.0mcd<br>26.0mcd | 1.85V<br>2.20V          | 2.5V<br>2.5V | 660nm<br>565nm           | C       |



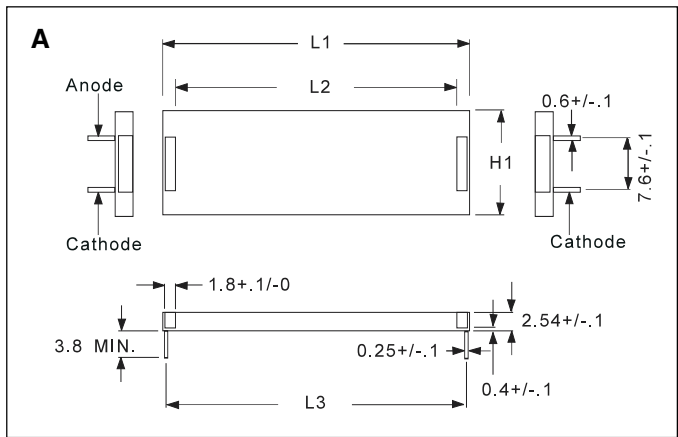
## Light Bar (19.95mm x 3.81mm)

|                      | Line No. | Part No. | Lens           | Luminous Intensity at 20mA |         | Forward Voltage at 20mA |         | Peak Wave Length at 20mA | Drawing |
|----------------------|----------|----------|----------------|----------------------------|---------|-------------------------|---------|--------------------------|---------|
|                      |          |          |                | Minimum                    | Maximum | Typical                 | Maximum |                          |         |
| ● ULTRA BRIGHT RED   | 1        | E2030    | Diffused White | 30.0mcd                    | 80.0mcd | 1.85V                   | 2.5V    | 660nm                    | A       |
| ● SUPER BRIGHT GREEN | 2        | E2031    | Diffused White | 20.0mcd                    | 50.0mcd | 2.2V                    | 2.5V    | 565nm                    | A       |



## LED Bargraph, 10 Segment

|                       | Line No. | Part No. | Lens     | Luminous Intensity at 10mA |           | Forward Voltage at 20mA |         | Peak Wave Length at 20mA | Drawing |
|-----------------------|----------|----------|----------|----------------------------|-----------|-------------------------|---------|--------------------------|---------|
|                       |          |          |          | Minimum                    | Typical   | Typical                 | Minimum |                          |         |
| ● ULTRA BRIGHT RED    | 3        | E1010    | Diffused | 9000μcd                    | 31,000μcd | 1.85V                   | 2.5V    | 660nm                    | B       |
| ● HIGH EFFICIENCY RED | 4        | E1011    | Diffused | 2200μcd                    | 9000μcd   | 2.0V                    | 2.5V    | 625nm                    | B       |
| ● YELLOW              | 5        | E1012    | Diffused | 2200μcd                    | 9000μcd   | 2.1V                    | 2.5V    | 590nm                    | B       |
| ● GREEN               | 6        | E1013    | Diffused | 3600μcd                    | 14,000μcd | 2.2V                    | 2.5V    | 565nm                    | B       |



## LED Modulite (Recommended for LCD Backlighting)

|         | Line No. | Part No. | Luminous Intensity at 20mA |         | Forward Voltage at 20mA (A) |         | Peak Wave Length at 20mA | Dimensions |    |      |    | Drawing |
|---------|----------|----------|----------------------------|---------|-----------------------------|---------|--------------------------|------------|----|------|----|---------|
|         |          |          | Minimum                    | Maximum | Typical                     | Maximum |                          | L1         | L2 | L3   | H1 |         |
| ● RED   | 1        | MD5219R  | 7.5mcd                     | 12.5mcd | 4.50V                       | 5.50V   | 625nm                    | 52         | 47 | 49.5 | 19 | A       |
| ● GREEN | 2        | MD5219G  | 6.6mcd                     | 11.0mcd | 4.50V                       | 5.50V   | 565nm                    | 52         | 47 | 49.5 | 19 | A       |

(A) Per 2 Pin Module