

**DESCRIPTION:**

The KWL-2727Ux series is 27.00mm x 27.00mm square type light bar display designed for a variety of applications where a large source of light is required, such as panel indicators, backlight legends and light arrays.

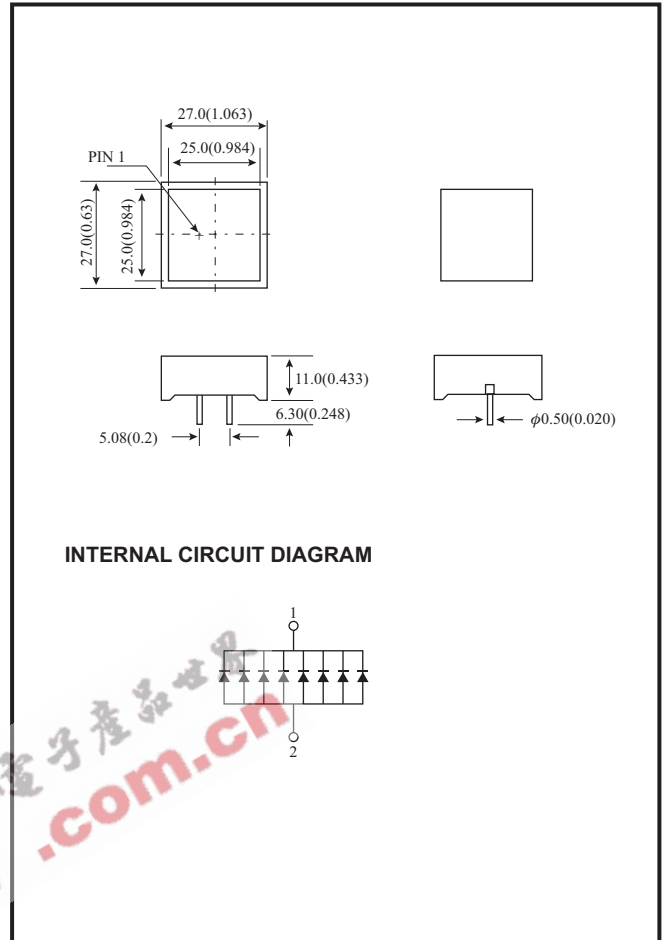
**ABSOLUTE MAXIMUM RATINGS: (Ta=25°C)**

| Parameter  | Max            |
|--|----------------|
| Reverse Voltage per segment                                      | 5 V            |
| Reverse Current per segment (Vr = 5V)                            | 100μA          |
| Derating Linear from 25°C per segment                            | 0.4mA/ °C      |
| Operating Temperature Range                                      | -40°C To 85°C  |
| Storage Temperature Range  | -40°C To 100°C |
| Soldering Temperature 1.6mm(1/16") from body for 5 sec. at 260°C |                |

- NOTES : 1. All dimensions are in millimeters (inches).  
 2. Tolerance is ±0.25mm(0.010) unless otherwise specified.  
 3. Specifications are subject to change without notice.  
 4. NP: No Pin.  
 5. NC: No Connect.

**TESTING CONDITION FOR EACH PARAMETER :**

| Parameter                  | Symbol | Unit | Test Condition |
|----------------------------|--------|------|----------------|
| Forward Voltage            | Vf     | V    | If=20mA        |
| Peak Emission Wave Length  | λp     | nm   | If=20mA        |
| Spectral Line Half-Width   | Δλ     | nm   | If=20mA        |
| Reverse Current            | Ir     | μA   | Vr=5V          |
| Average Luminous Intensity | Iv     | μ cd | If=10mA        |

**PACKAGE DIMENSIONS**

**PART NO. SELECTION AND APPLICATION INFORMATION (RATINGS AT 25°C AMBIENT)**

| Part No.   | Chip            |                  | C.C<br>or<br>C.A | Wave<br>Length<br>λp (nm) | Absolute Maximum Ratings |            |            |                      | Electro-optical Characteristic |      |      |                   |          |      |
|------------|-----------------|------------------|------------------|---------------------------|--------------------------|------------|------------|----------------------|--------------------------------|------|------|-------------------|----------|------|
|            | Raw<br>Material | Emitted<br>Color |                  |                           | Δλ<br>(nm)               | Pd<br>(mW) | If<br>(mA) | If<br>(Peak)<br>(mA) | Vf (V)<br>Per Chip             |      |      | If<br>(Rec)<br>mA | Iv (mcd) |      |
|            |                 |                  |                  |                           |                          |            |            |                      | Min.                           | Typ. | Max. |                   | Min.     | Typ. |
| KWL-2727U3 | GaAsP/GaP       | Hi-Eff Red       | Common<br>Anode  | 635                       | 45                       | 100        | 50         | 100                  | 1.7                            | 1.9  | 2.6  | 10-20             | 6.0      | 16.0 |
| KWL-2727US | GaAlAs          | Super Red        |                  | 660                       | 20                       | 100        | 50         | 100                  | 1.5                            | 1.9  | 2.6  | 10-20             | 15.0     | 32.0 |
| KWL-2727U2 | GaP             | Green            |                  | 565                       | 30                       | 100        | 50         | 100                  | 1.7                            | 2.2  | 2.6  | 10-20             | 6.0      | 14.0 |
| KWL-2727UG | GaP             | Super Green      |                  | 570                       | 30                       | 100        | 50         | 100                  | 1.7                            | 2.2  | 2.6  | 10-20             | 10.0     | 20.0 |
| KWL-2727U6 | GaAsP/GaP       | Yellow           |                  | 585                       | 30                       | 100        | 50         | 100                  | 1.7                            | 1.9  | 2.6  | 10-20             | 6.0      | 14.0 |

- REMARKS : 1. The average luminous intensity is obtained by summing the luminous intensity of each segment and dividing by the total number of segments.  
 2. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (International Commission on Illumination) eye-response curve.  
 3. Clean only by pure water, isopropanol, ethanol, Freon TF (or equivalent).