



TOYO LED ELECTRONICS LIMITED

CODE = UR1
ULTRA BRIGHT RED

ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

| PARAMETER | SYMBOL | MAXIMUM RATING | UNIT |
|--|------------|----------------|------|
| POWER DISSIPATION | P_T | 105 | mW |
| PEAK FORWARD CURRENT (1/10 DUTY CYCLE, 0.1 MS PULSE WIDTH) | I_{PEAK} | 150 | mA |
| FORWARD CURRENT | I_F | 30 | mA |
| REVERSE VOLTAGE | V_R | 5 | V |
| OPERATING TEMPERATURE RANGE | T_A | -40°C TO +85°C | |
| STORAGE TEMPERATURE RANGE | T_{STG} | -40°C TO +85°C | |
| SOLDER TEMPERATURE 1/16 INCH BELOW SEATINGPLANE FOR 3 SECONDS AT 260°C | | | |

ELECTRICAL OPTICAL CHARACTER AND CURVES AT $T_O = 25^\circ\text{C}$

| PARAMETER | SYMBOL | MIN | TYP | MAX | UNIT | TEST CONDITION |
|-----------------------------------|-------------------------|------|-----|------|---------------|---------------------|
| Average Luminous Intensity | I_v | 71 | 75 | 78 | MCD | $I_F = 20\text{mA}$ |
| Dominant Emission Wavelength | λ_p / λ_d | 630 | 630 | 632 | nm | $I_F = 20\text{mA}$ |
| Spectral Line Half-Width | $\Delta\lambda$ | - | 15 | - | nm | $I_F = 20\text{mA}$ |
| Forward Voltage | V_F | 1.90 | 2.0 | 2.20 | V | $I_F = 20\text{mA}$ |
| Reverse Current | I_R | 5.0 | - | 10.0 | μA | $V_R = 5\text{V}$ |
| Luminous Intensity Matching Ratio | I_v | - | - | 2:1 | - | $I_F = 20\text{mA}$ |

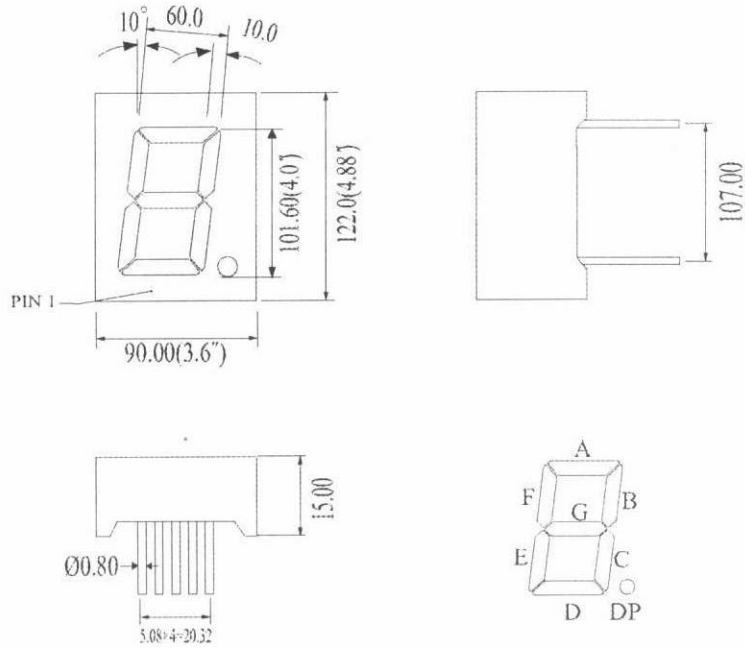
RoHS COMPLIANT



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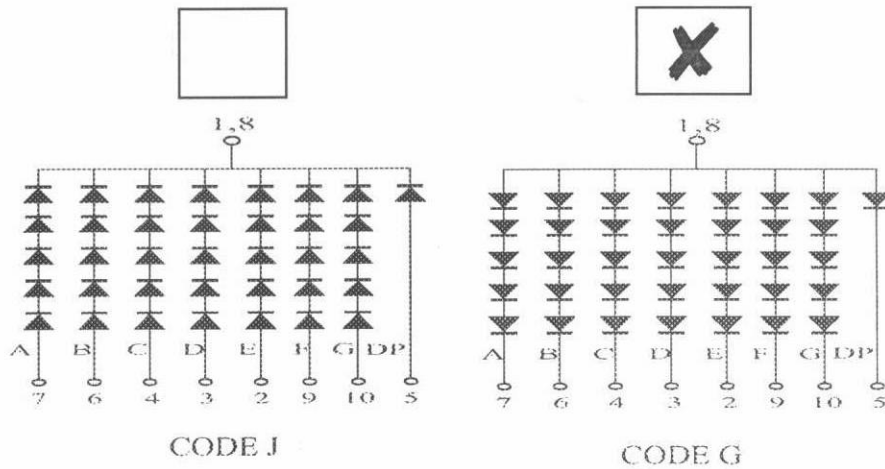
PACKAGE DIMENSION

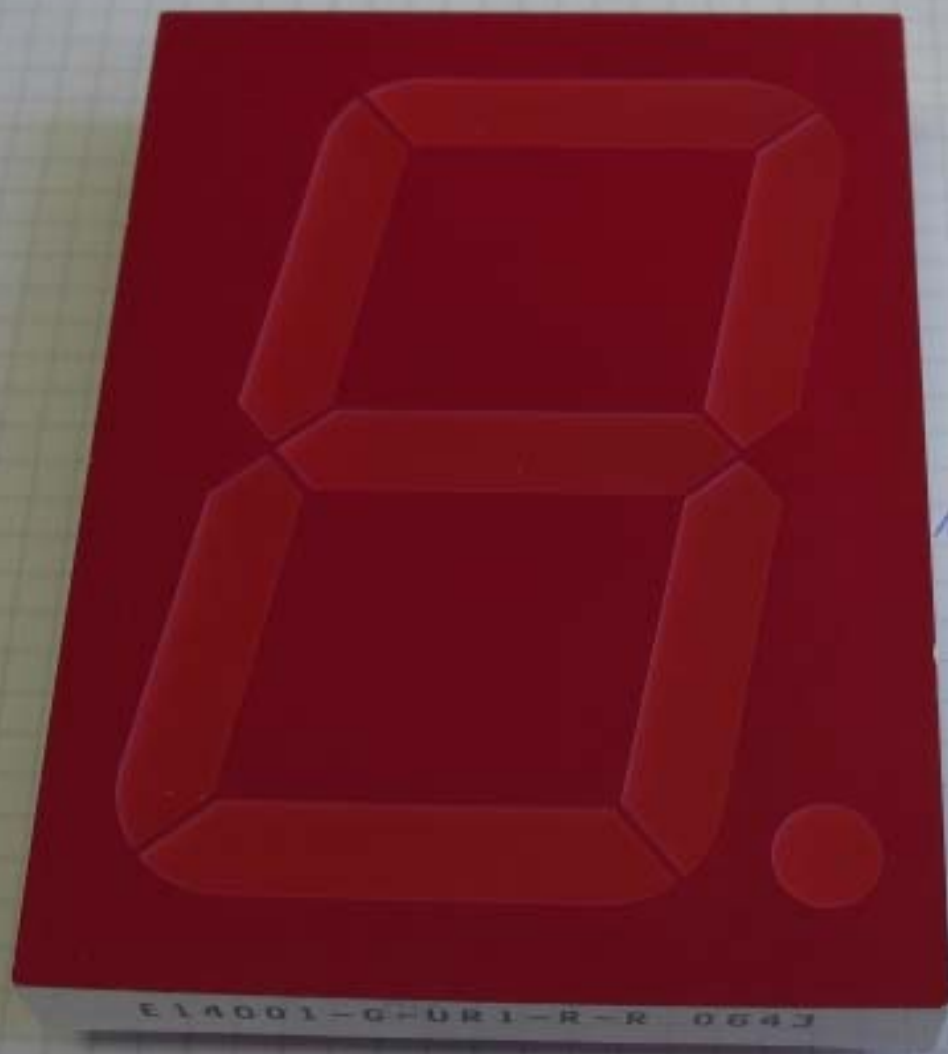
E14001



UNIT: MM(INCH) TOLERANCE: ±0.25(0.01")

INTERNAL CIRCUIT DIAGRAM





120mm

90mm