



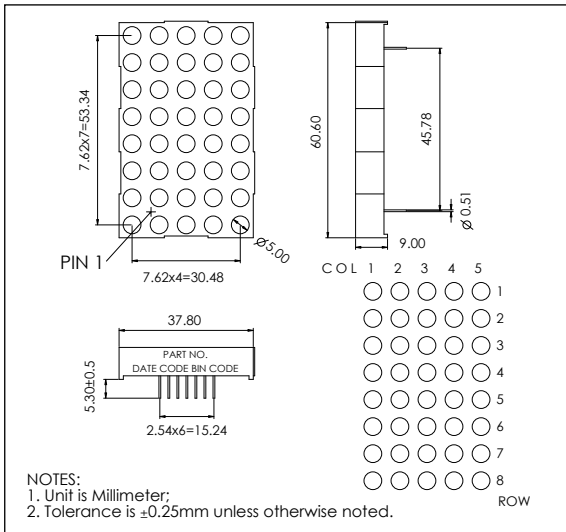
## Ø 5 5x8 Dot Matrix Single Color LED Display

2.0" (58.84mm) matrix height

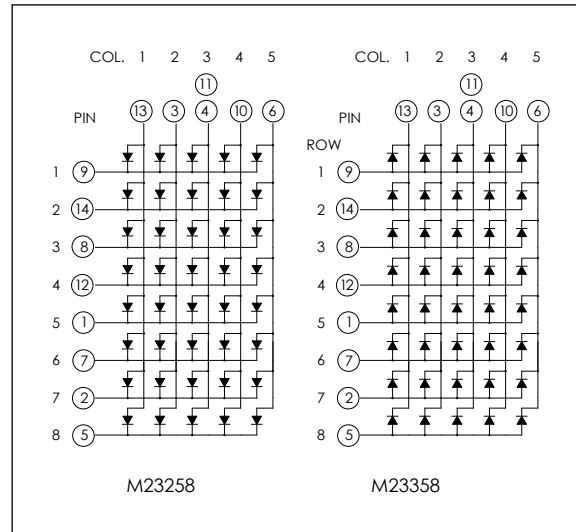
● ABSOLUTE MAXIMUM RATINGS : (T<sub>a</sub>=25°C)

| PARAMETER  | RED ORANGE      | GREEN | YELLOW | SR RED | SUPER RED | SUPER GREEN | SUPER YELLOW | UNIT  |
|--|-----------------|-------|--------|--------|-----------|-------------|--------------|-------|
| Power Dissipation Per Seg  | 65              | 65    | 55     | 72     | 65        | 65          | 55           | mW    |
| Peak Forward Current Per Seg<br>(1/10 Duty Cycle, 0.1ms Pulse Width) | 100             | 100   | 80     | 125    | 100       | 100         | 100          | mA    |
| Continuous Forward Current Per Seg                                   | 25              | 25    | 20     | 30     | 25        | 25          | 25           | mA    |
| Derating Linear From 25°C Per Seg                                    | 0.33            | 0.33  | 0.25   | 0.42   | 0.33      | 0.33        | 0.33         | mA/°C |
| Reverse Voltage Per Seg  | 5               | 5     | 5      | 5      | 5         | 5           | 5            | v     |
| Operating Tem Range  | -35°C to + 85°C |       |        |        |           |             |              |       |
| Storage Tem Range  | -35°C to + 85°C |       |        |        |           |             |              |       |
| Solder Tem 1/16 inch Below Seating Plane at 260°C for 3 seconds      |                 |       |        |        |           |             |              |       |

### ● PACKAGE DIMENSIONS



### ● INTERNAL CIRCUIT DIAGRAM



### ● ELECTRICAL/OPTICAL CHARACTERISTICS

| PART NO.    | COLOR        | $\lambda_p/\lambda_d$<br>(nm) | Half-Spectral Width( $\Delta\lambda$ ) | Description | AVERAGE LUMINOUS INTENSITY |           |                                   | FORWARD VOLTAGE |          |
|-------------|--------------|-------------------------------|--|-------------|----------------------------|-----------|-----------------------------------|-----------------|----------|
|             |              |                               |  |             | Min.(mcd)                  | Typ.(mcd) | @ IF(mA)                          | Typ.(V)         | @ IF(mA) |
| M232580E... | RED ORANGE   | 632/622                       | 35                                     | CA          | 1.4                        | 3.5       | I <sub>p</sub> =80mA<br>1/16 Duty | 2.0             | 20       |
| M233580E... |              |                               |  | CC          |                            |           |                                   |                 |          |
| M232580G... | GREEN        | 568/570                       | 30                                     | CA          | 2.0                        | 5.0       |                                   | 2.1             | 20       |
| M233580G... |              |                               |  | CC          |                            |           |                                   |                 |          |
| M232580Y... | YELLOW       | 589/590                       | 35                                     | CA          | 1.4                        | 3.5       |                                   | 2.1             | 20       |
| M233580Y... |              |                               |  | CC          |                            |           |                                   |                 |          |
| M232580S... | SR RED       | 660/643                       | 20                                     | CA          | 2.2                        | 5.5       |                                   | 1.8             | 20       |
| M233580S... |              |                               |  | CC          |                            |           |                                   |                 |          |
| M232589Q... | SUPER RED    | 656/640                       | 20                                     | CA          | 2.6                        | 6.5       |                                   | 2.1             | 20       |
| M233589Q... |              |                               |  | CC          |                            |           |                                   |                 |          |
| M232580T... | SUPER GREEN  | 573/571                       | 15                                     | CA          | 3.6                        | 9.0       | 2.1                               | 20              |          |
| M233580T... |              |                               |  | CC          |                            |           |                                   |                 |          |
| M232589C... | SUPER YELLOW | 591/589                       | 15                                     | CA          | 3.6                        | 9.0       | 2.1                               | 20              |          |
| M233589C... |              |                               |  | CC          |                            |           |                                   |                 |          |

Notes : The component is available in :

- Low Current
- AlInGaP high intensity red, orange, yellow green, amber