

World Components Network Service Ltd

WCN1-0080SR-A51

SPECIFICATION

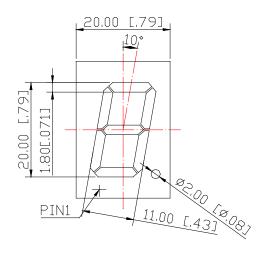
| WCN | | | CUSTOMER |
|-------|--|--|----------|
| | | | |
| NOTE: | | | |
| | | | |
| | | | |

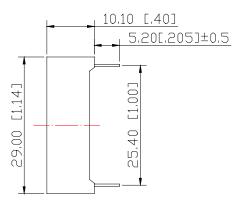
REVISION: 01

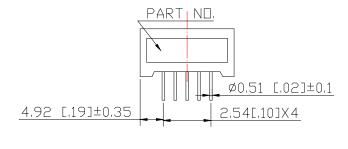


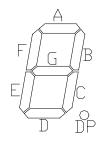
World Components Network Service Ltd

Outer Dimension:



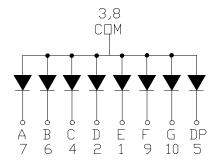






Notes: Unless otherwise stated, The tolerance is ± 0.25 m

Circuit Diagram:



Pin Connection:

| PIN NO. | CONNECTION | PIN NO. | CONNECTION |
|---------|--------------|---------|--------------|
| 1 | Cathode E | 6 | Cathode B |
| 2 | Cathode D | 7 | Cathode A |
| 3 | Common Anode | 8 | Common Anode |
| 4 | Cathode C | 9 | Cathode F |
| 5 | Cathode DP | 10 | Cathode G |

2/3



World Components Network Service Ltd

Features:

. High Reliability

. Color: Red

. Low Power Requirement

Description:

. Single Digit LED Display

. Digit Height: 20.0mm(0.80")

Black Face and Encapsulation With Milky Segment

Absolute Maximum Rating ($Ta=25^{\circ}C$):

| Parameter | Symbol | Condition | Color | Rating | Units |
|--------------------------------------|--------------------------|--------------------|-------|---------|---------------|
| Power Dissipation Per Segment | Pd | | Red | 50 | mW |
| Forward Current Per Segment | I_{F} | | Red | 25 | mA |
| Derating Of If Per Segment | $\triangle \mathbf{I_F}$ | Ta≥25°C | Red | 0.30 | mA/°C |
| Peak Forward Current Per Segment | I_{FP} | 1/10 Duty 0.1ms | Red | 100 | mA |
| Reverse Voltage Per Segment | V_R | | Red | 5 | V |
| Operating Temperature Range | Topr | | | -35~+85 | ${\mathbb C}$ |
| Storage Temperature Range | Tstg | _ | | -35~+85 | ${\mathbb C}$ |

Electrical/Optical Characteristics Rating(Ta= 25° C):

| Item | Symbol | Test | Location | Color | Rating | | | Units |
|--|----------------|------------------------|-------------|-------|--------|-------|------|-------|
| | | conditions | | | Min. | Typ. | Max. | |
| Forward Voltage | $\mathbf{V_F}$ | I _F =20mA | Per Segment | Red | | 1.80 | 2.00 | V |
| Reverse Current | I_R | $V_R=5V$ | Per Segment | Red | | | 100 | μA |
| Luminous Intensity | Iv | I _F =10mA | Per Segment | Red | 5051 | 10000 | | ucd |
| Wave Length | λР | $I_F=20mA$ | Per Segment | Red | _ | 660 | _ | nm |
| | λр | 1 _F -201111 | b | | | 643 | | 11111 |
| Spectral Line Half Width | Δλ | I _F =20mA | Per Segment | Red | | 20 | _ | nm |
| Luminous Intensity Matching Ratio (Segment To Segment) | I_{v-m} | I _F =20mA | | | | | 2:1 | |

Luminous Intensity Sorting: (Luminous intensity tolerance: +/-10%)

| Rank | Symbol | Condition | Min | Max | Unit |
|---------|--------|------------|-------|-------|------|
| K | K | $I_F=10mA$ | 5051 | 8000 | μcd |
| ${f L}$ | L | $I_F=10mA$ | 8001 | 12650 | μcd |
| M | M | $I_F=10mA$ | 12651 | 19990 | μcd |

Soldering Conditions: Soldering Temp. $\leq +260^{\circ}$ C, Soldering Time. ≤ 3 sec.

(at 1.6 mm Distance from The Case of Reflector Edge)