

BRIGHT LED ELECTRONICS CORP.

LED DISPLAY SPECIFICATION

●COMMODITY : 0.40"(10.16mm) SINGLE DIGIT LED DISPLAY

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●DEVICE NUMBER : BS-A402RD

VERSION : 1.0

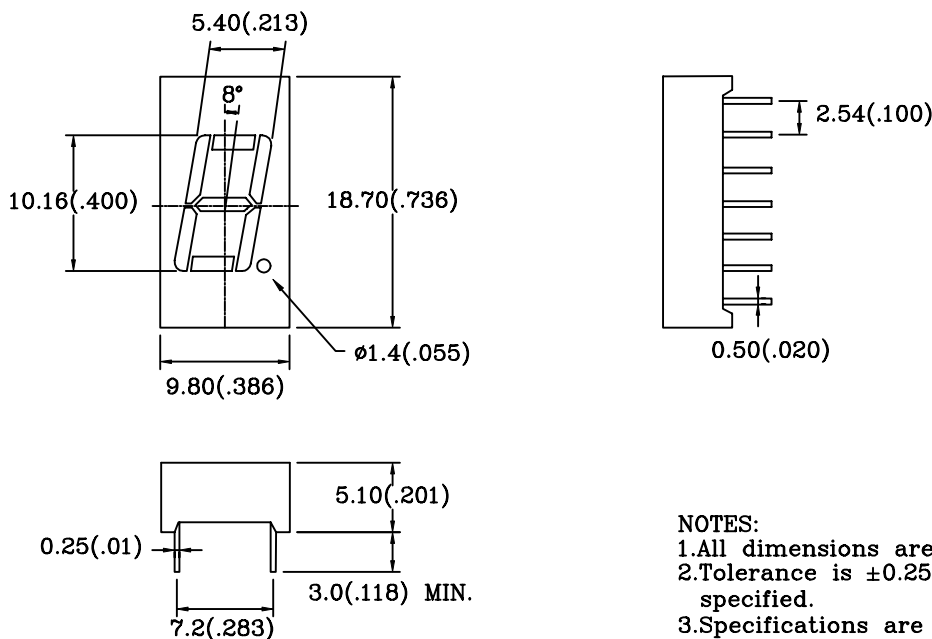
●ELECTRICAL AND OPTICAL CHARACTERISTICS (Ta=25°C)

| Chip | | Absolute Maximum Rating | | | | Electro-optical Data (At 10mA) | | | Surface Color | Segment Color |
|---------------|-------------------------|-------------------------|---------|---------|-------------|--------------------------------|------|---------------|---------------|---------------|
| Emitted Color | Peak Wave Length λP(nm) | Δλ (nm) | Pd (mW) | If (mA) | Peak If(mA) | Vf(V) | | Iv Typ. (mcd) | | |
| | | | | | | Typ. | Max. | | | |
| Green | 568 | 30 | 80 | 30 | 150 | 2.1 | 2.5 | 3.0 | Black | White |

●ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

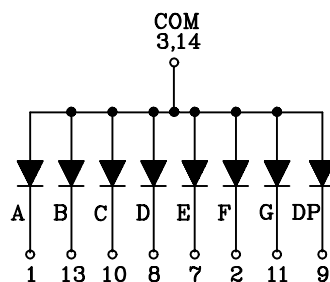
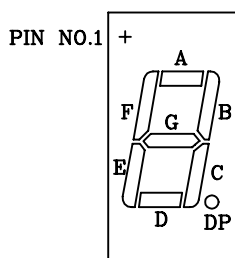
Reverse Voltage 5V
 Reverse Current (VR=5V) 100μA
 Operating Temperature Range -40°C ~ 80°C
 Storage Temperature Range -40°C ~ 85°C
 Lead Soldering Temperature (1/16" From Body).....260°C For 5 Seconds

PACKAGE DIMENSIONS:



NOTES:
 1.All dimensions are in millimeters(inches).
 2.Tolerance is ±0.25mm(.01") unless otherwise specified.
 3.Specifications are subject to change without notice.

PIN FUNCTIONS:



NP:4,5,6,12.

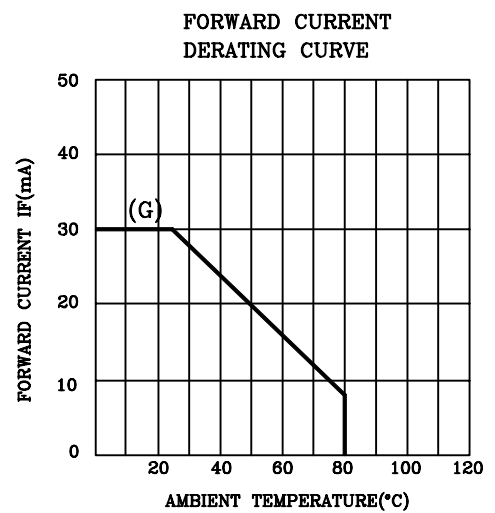
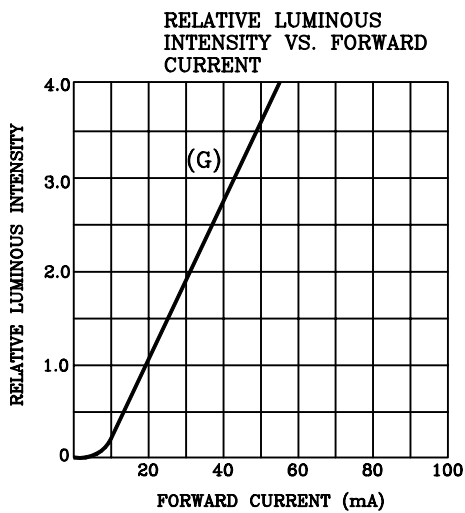
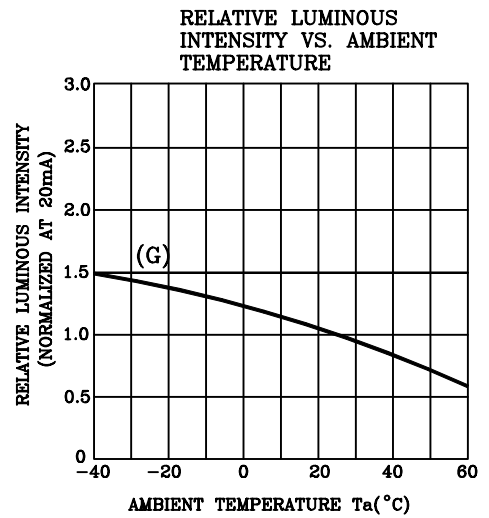
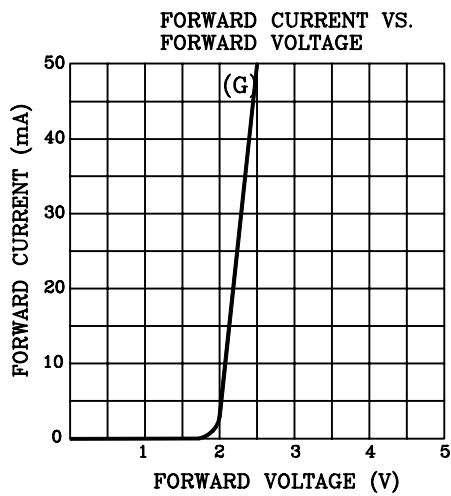
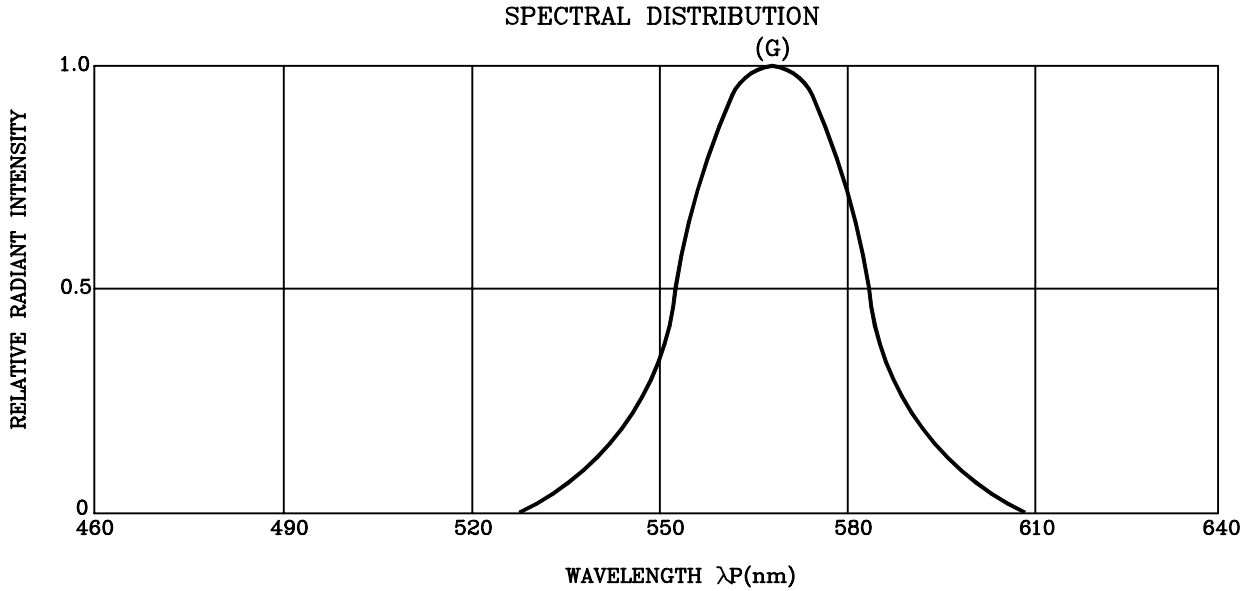
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TYPICAL CHARACTERISTICS

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RELIABILITY TEST

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VERSION:1.0

| Classification | Test Item | Reference Standard | Test Conditions | Result |
|--------------------|--|---|--|--------|
| Endurance Test | Operation Life | MIL-STD-750:1026 MIL-STD-883:1005 JIS C 7021 :B-1 | Connect with a power If=30mA Ta=Under room temperature Test time=1,000hrs(-24hrs,+72hrs) | 0/10 |
| | High Temperature High Humidity Storage | MIL-STD-202:103B JIS C 7021 :B-11 | Ta=65°C ± 5°C RH=90%-95% Test time=240hrs±2hrs | 0/10 |
| | High Temperature Storage | MIL-STD-883:1008 JIS C 7021 :B-10 | High Ta=85°C ± 5°C Test time=1,000hrs(-24hrs,+72hrs) | 0/10 |
| | Low Temperature Storage | JIS-C-7021 :B-12 | Low Ta= -35°C ± 5°C Test time=1,000hrs(-24hrs,+72hrs) | 0/10 |
| Environmental Test | Temperature Cycling | MIL-STD-202:107D MIL-STD-750:1051 MIL-STD-883:1010 JIS C 7021 :A-4 | -35°C ~ 25°C ~ 85°C ~ 25°C 30min 5min 30min 5min Test Time=10cycle | 0/10 |
| | Thermal Shock | MIL-STD-202:107D MIL-STD-750:1051 MIL-STD-883:1011 | 85°C ± 5°C ~ -35°C ± 5°C 10min 10min Test Time=10cycle | 0/10 |
| | Solder Resistance | MIL-STD-202:201A MIL-STD-750:2031 JIS C 7021 :A-1 | T.sol=260 ± 5°C Dwell Time=10 ± 1 sec. | 0/10 |
| | Solderability | MIL-STD-202:208D MIL-STD-750:2026 MIL-STD-883:2003 JIS C 7021 :A-2 | T.sol=230 ± 5°C Dwell Time=5 ± 1 sec. | 0/10 |

JUDGMENT CRITERIA OF FAILURE FOR THE RELIABILITY

| Measuring items | Symbol | Measuring conditions | Judgement criteria for failure |
|--------------------|--------|----------------------|--------------------------------|
| Forward voltage | VF | IF=10mA | Over Ux1.2 |
| Reverse current | IR | VR=5V | Over Ux2 |
| Luminous intensity | IV | IF=10mA | Below Sx0.5 |

Note: 1.U means the upper limit of specified characteristics. S means initial value.

2.Measurment shall be taken between 2 hours and after the test pieces have been returned to normal ambient conditions after completion of each test.