



Specification For Approval

Customer :

Description : LED Display

Part Number : RL-D5613SBAW/D15

Date : 2004-12-16

Approved By:

Prepared By:

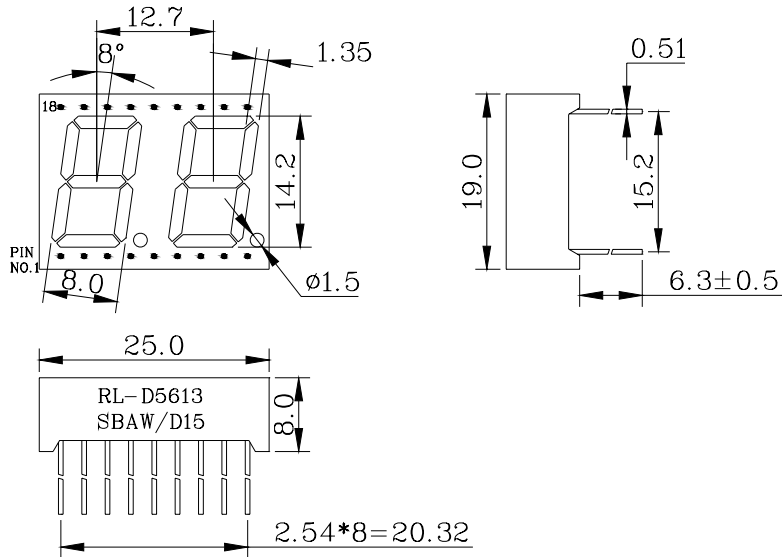
| Checked | QC | Designed | Sales |
|---------|----|----------|-------|
| | | | |



Part No:RL-D5613SBAW/D15

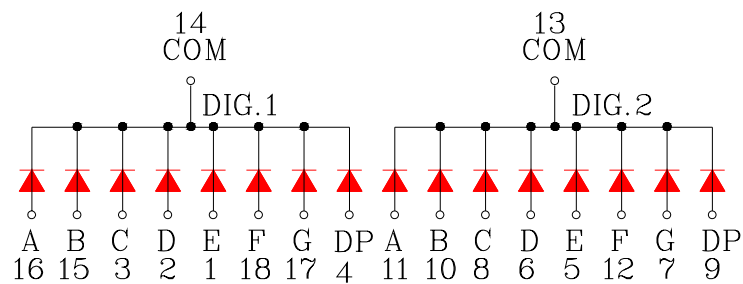
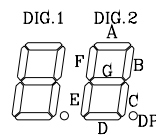
★ Package Dimensions

Unit:mm



NOTE: TOLERANCE± 0.3mm

PIN FUNCTION



★ Selection Guide

| Part NO. | Chip | | LED Display | | |
|----------------------|-------------|---------------|---------------|----------|---------------|
| | Material | Emitted Color | Surface color | Polarity | Colloid color |
| RL-D5613 SBAW/D15 | GaAlAs/GaAs | Super Red | Gray | CC | White |



Part No:RL-D5613SBAW/D15

★Absolute Maximum Ratings

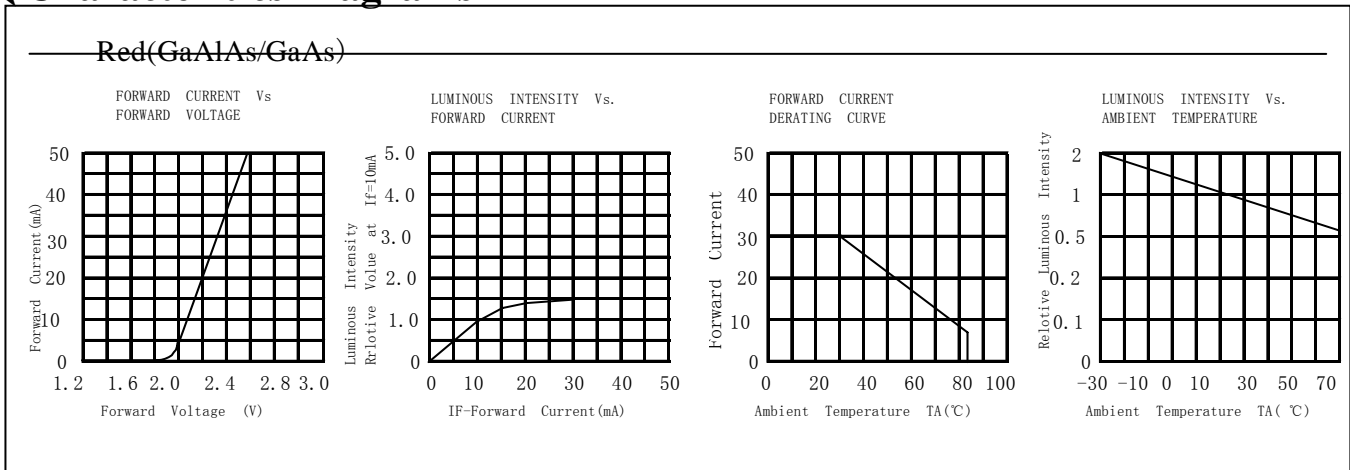
(Ta=25°C)

| Patameter | Symbol | MAX. Rating | Unit |
|---|--------|-------------|------|
| Power Dissipation | Pd | 110 | mW |
| Peak forward current (10μs Pulse) | IFM | 200 | mA |
| Reverse Current | IR | 100 | μA |
| Continuous Forward Current | IF | 20 | mA |
| Operating Temperature | Topr | -40~+85 | °C |
| Storage Temperature | Tstg | -40~+85 | °C |
| Lead Soldering Temperature: 260°C For 5 SEC | | | |

★Electric-Optical Characteristics

| Patameter | Symbol | Test Condition | MIN | TYP | MAX | Unit |
|--------------------------|--------|----------------|------|------|-----|------|
| Forward Voltage | VF | IF=20mA | 1.5 | 1.8 | 2.4 | V |
| Reverse Voltage | VR | IR=100uA | 5 | | | V |
| Luminous Intensity | IV | IF=10mA | 2750 | 4120 | | μ cd |
| Peak Emission Wavelength | λ P | IF=20mA | | 645 | | nm |

★Characteritics Diagrams




Products: Led Displays
★Reliability Test

| No | Item | Test Condition | Test Hours/Cycles | Samples Tested | Acc./Rej |
|----|------------------------------------|--|-------------------|----------------|----------|
| 1 | Room Temperature DC Operating Life | Ta=25°C, I _F =20mA | 1000 Hrs | 76 | 0/1 |
| 2 | Thermal Shock | -10°C (5min)→ (10sec)→+100 °C (5min) | 100 Cycles | 76 | 0/1 |
| 3 | Temperature Cycle | -40°C (30min) →(5min)→+85 °C (30min) | 100 Cycles | 76 | 0/1 |
| 4 | High Temp./ High Humi. Test | 85°C/85%RH | 1000 Hrs | 76 | 0/1 |
| 5 | High Temperature Storage | Ta=100°C | 1000 Hrs | 76 | 0/1 |
| 6 | Low Temperature Storage | Ta= - 40°C | 1000 Hrs | 76 | 0/1 |
| 7 | Soldering Heat | 260°C±5°C | 5 Seconds | 76 | 0/1 |