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Technical Data Sheet

MODEL NO : Q5060R4-PLK

5050 Package 5.0*5.0*1.45mm Chip LEDs

Features :

- Compatible with automatic placement equipment
- Compatible with reflow solder process

Applications :

- Indicators
- Automotive : backlighting in dashboard and switch
- Backlight for LCD

| Dice material | Emitted color | Lens Color |
|---------------|---------------|-------------|
| InGaAlP | Red | Water Clear |

Electrical/Optical Characteristics(Ta=25°C)

| Parameter | Test Condition | Symbol | Value | | | Unit |
|-----------------------------|----------------|------------------|-------|------|------|---------|
| | | | Min | Typ | Max | |
| Wavelength at peak emission | If=60mA | λ peak | | 625 | | nm |
| Spectral half bandwidth | If=60mA | $\Delta \lambda$ | | 35 | | nm |
| Dominant wavelength | If=60mA | λ dom | 620 | | 630 | nm |
| Forward voltage | If=60mA | Vf | 2.0 | 2.2 | 2.4 | V |
| Luminous intensity | If=60mA | Iv | 1500 | 1750 | 2000 | mcd |
| Viewing angle | If=60mA | $2 \theta 1/2$ | | 120 | | Deg |
| Reverse current | Vr=5V | Ir | | | 10 | μ A |

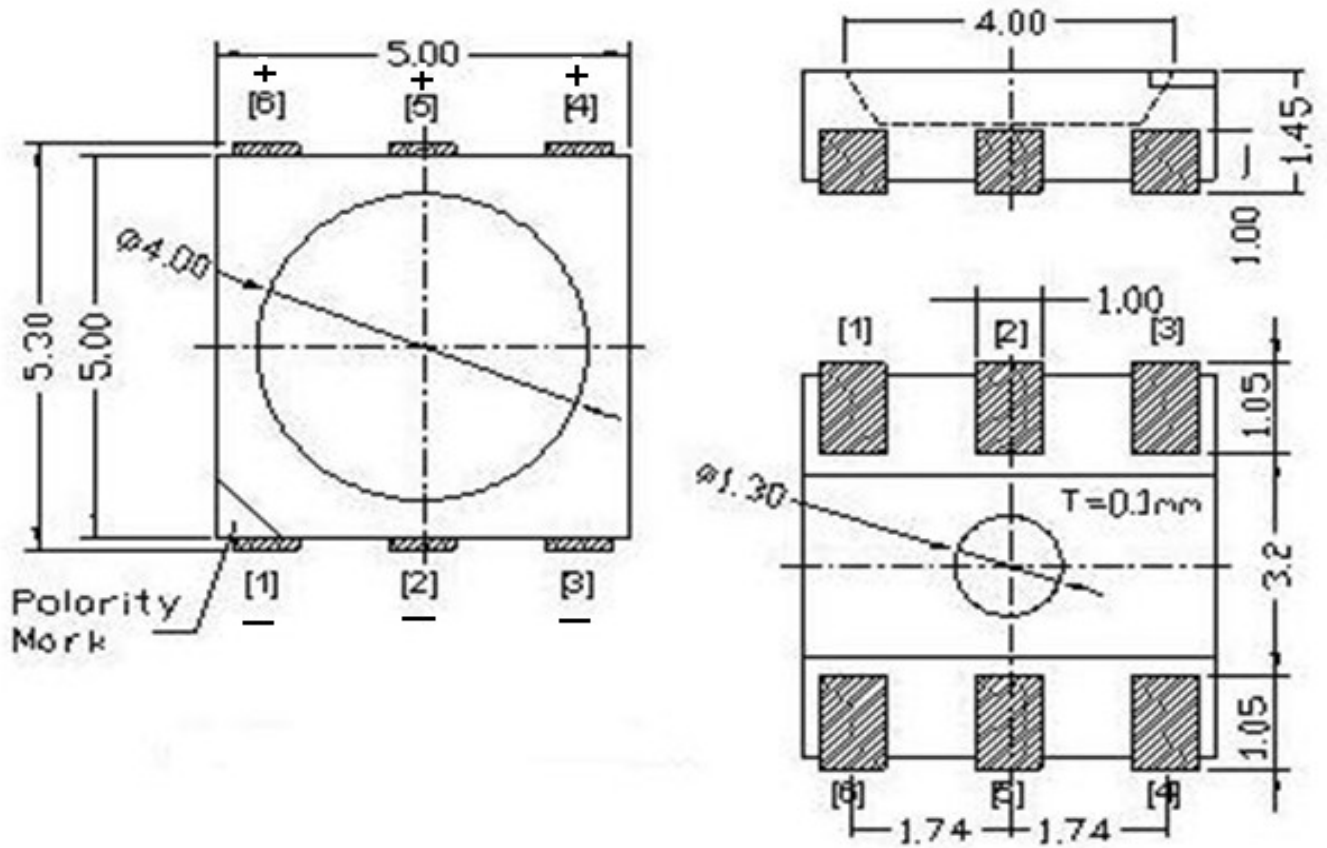
Absolute Maximum Ratings(Ta=25°C)

| Parameter | Symbol | Value | Unit |
|--|--------|----------|------|
| Power dissipation | Pd | 200 | mW |
| Forward current | If | 60 | mA |
| Reverse voltage | Vr | 5 | V |
| Operating temperature range | Top | -20 ~+80 | °C |
| Storage temperature range | Tstg | -40 ~+80 | °C |
| Peak pulsing current (1/8 duty f=1kHz) | Ifp | 60 | mA |



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PACKAGING DIMENSIONS



2016AUG22Y



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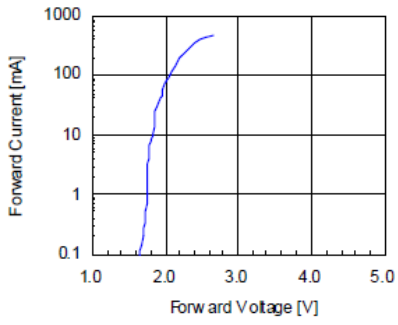


Fig 3. Forward Voltage vs. Temperature

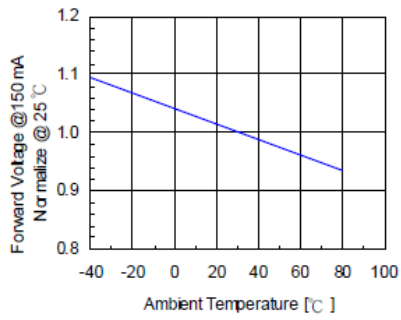


Fig 5. Relative Intensity vs. Wavelength

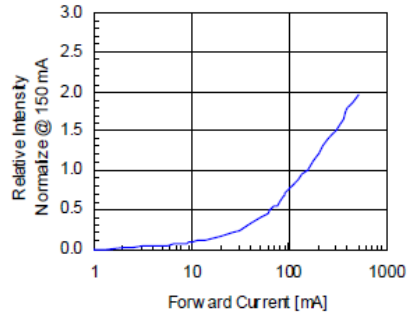
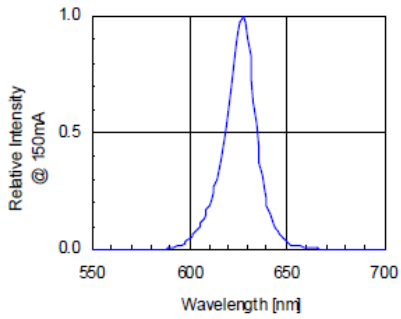
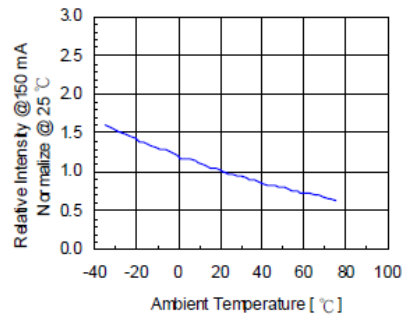
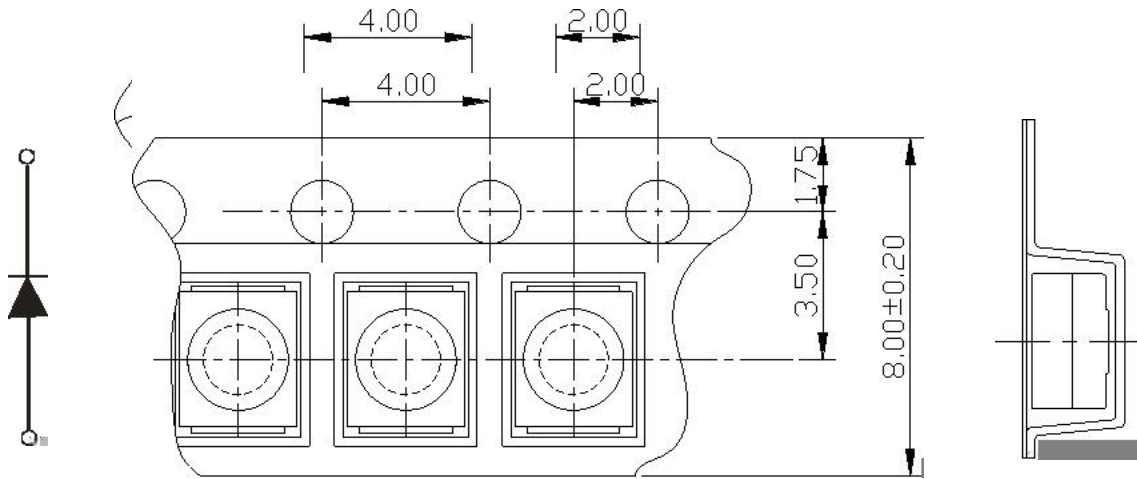


Fig 4. Relative Intensity vs. Temperature

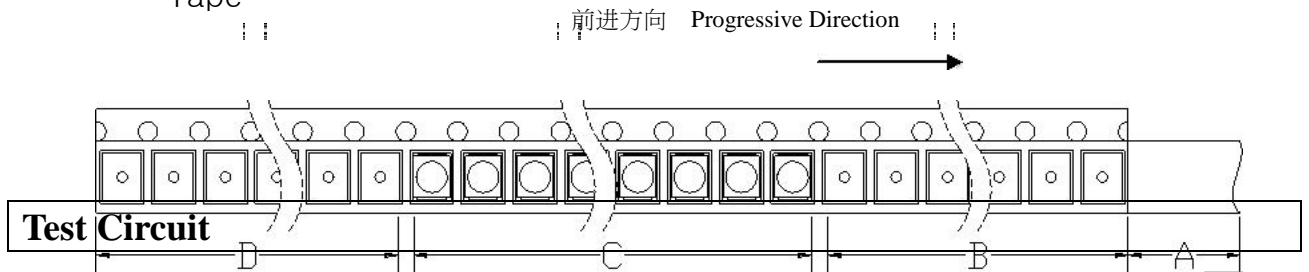




单位：mm，未注公差：±0.1 mm

All dimensions in mm, tolerances unless mentioned is ±0.1 mm.

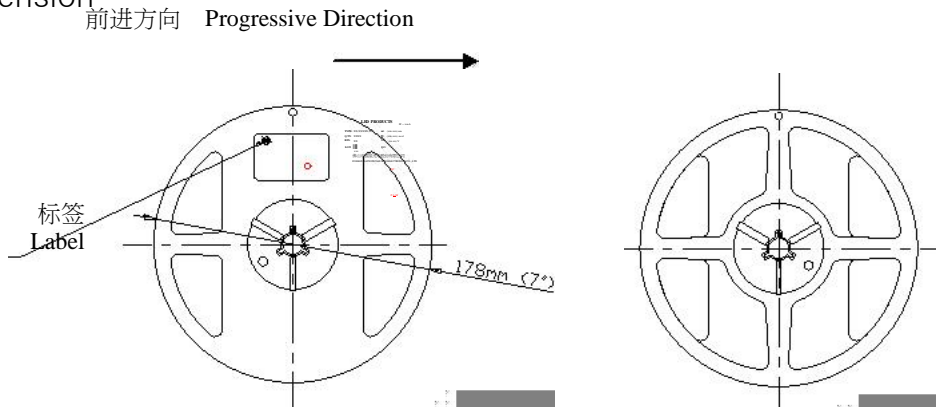
◇ 编带细节 Details Of Carrier Tape



A：盖带，300 mm；B：引导，空带，200mm；C：编载产品 2000只；D：尾部，空带，200mm

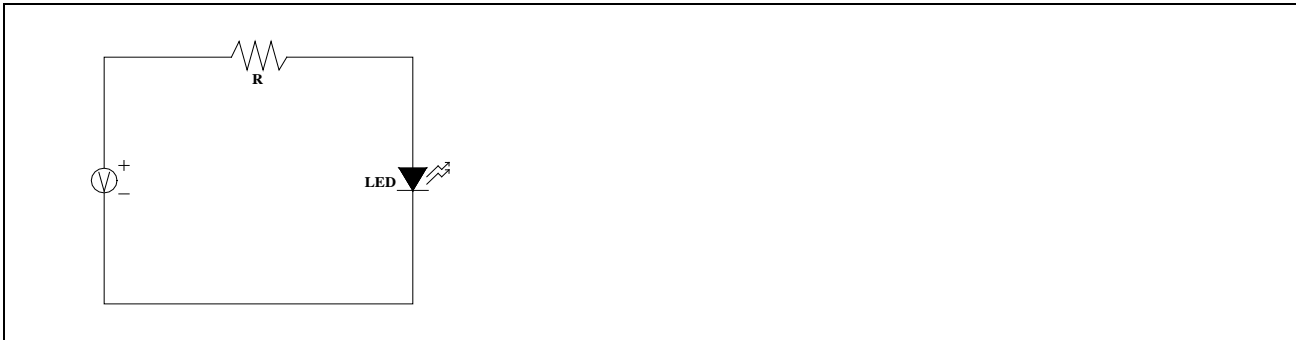
A: Top Cover Tape, 300mm; B: Leader, Empty, 200mm; C: 2000 Lamps Loaded; D: Trailer, Empty, 200mm.

◇ 带盘 Reel Dimension

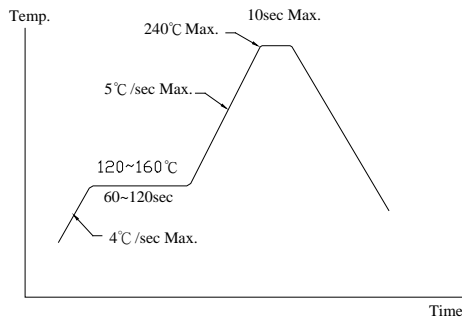




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Reflow Temp. / Time :



Reliability Test Items And Conditions

The reliability of products shall be satisfied with items listed below.

| No. | Items | Test Condition | Test Hours/Cycles | Sample Size |
|-----|--------------------------------|--|-------------------|-------------|
| 1 | Solder Heat | TEMP : 260°C±5°C | 5 sec | 48 pcs |
| 2 | Temperature Cycle | 90°C ~ 25°C ~ -30°C ~ 25°C 30m 5m 30m 5m | 300Cycles | 48 Pcs |
| 3 | Thermal Shick | 100°C ~ -55°C 10m 10m | 100Cycles | 48 Pcs |
| 4 | Operation Life | If=20mA | 1000 Hrs | 48 Pcs |
| 5 | High Temperature Storage | Temp:90°C | 1000Hrs | 48 Pcs |
| 6 | Low Temperature Storage | Temp:-30°C | 1000Hrs | 48 Pcs |
| 7 | High Temperature/High Humidity | 80°C / R.H80% | 1000Hrs | 48 Pcs |