

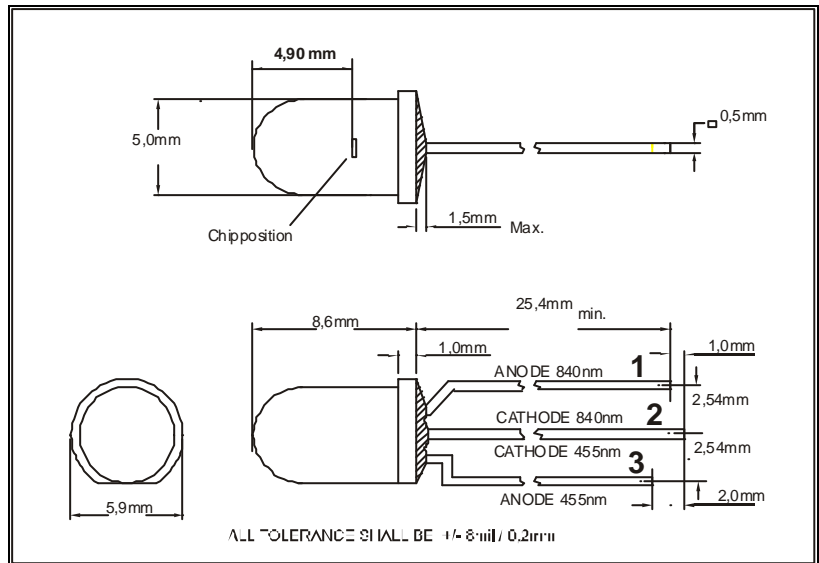
DualWavelength LED

840nm/456nm

R&D-FQR54812ABHZ

Features

- * Standard design LED for special purpose
Based on double hetero structure of GaAlAs
- * 1.LED=840nm / 2. LED = 455nm
- * Water-clear package style without stand-off
- * Three lead T1 3/4 case with common Cathodes
- * Application : Spectral analysis
IR/Red-Flash-Lights
Medical instruments



Electrical and optical characteristics and absolute maximum ratings (Ta=25°C unless otherwise noted)

| Symbol | Parameter | MIN | Typ | MAX | Unit | Test conditions |
|------------------------|--------------------------------|------|-------|------|-------|--|
| I _F | DC Forward current | | | 100 | mA | 1. LED |
| I _F | DC Forward current | | | 25 | mA | 2. LED |
| I _{PEAK} | Peak Forward current 1. LED | | | 1000 | mA | Tp< 10µsec. ; T=1:100 ; Rtherm < 100 K/W |
| I _{PEAK} | Peak Forward current 2. LED | | | 75 | mA | Tp< 10µsec. ; T=1:100 ; Rtherm < 100 K/W |
| V _F | Forward Voltage | 1,3 | 1,62 | 2,1 | V | IF = 50mA 1.LED |
| V _F | Forward Voltage | | 3,2 | 3,4 | V | IF = 20mA 2.LED |
| V _R | Reverse Voltage | 4 | | | V | I _{rev} = 100µA 1.LED/ 2.LED |
| λ _{Peak} | Peak Wavelength | 830 | 840 | 850 | nm | IF = 50mA 1.LED |
| λ _{Peak} | Peak Wavelength | 450 | 456 | 460 | nm | IF = 20mA 2.LED |
| Δλ _{0.5} | Bandwidth of half power | 25 | 30 | | nm | IF = 50mA , both LED's |
| t _{f/r} | Fall time / Rise time | | 20 | | ns | IF = 100mA 1.LED |
| t _{f/r} | Fall time / Rise time | | 500 | | ns | IF = 100mA 2.LED |
| Φ _E | Total Power Output | 20 | 32 | | mW | IF = 50mA 1.LED |
| I _E | Radiant Intensity | 80 | 145 | | mW/sr | IF = 50mA 1.LED |
| Φ _E | Total Power Output | 22 | 27 | 32 | mW | IF = 20mA 2.LED |
| I _v | Luminous intensity | | TBD | | mcd | IF = 20mA 2.LED |
| 2Φ _{0.5} | Emission Angel horizontal | | 36 | 40 | deg. | Φ _E / I _v = 50%; IF=20mA |
| 2Φ _{0.5} | Emission Angel vertical | | 30 | 35 | deg. | Φ _E / I _v = 50%; IF=20mA |
| TK _{VF} | Temp.Coeff. of Forward Voltage | | - 2 | | mV/K | |
| TK _F | Temp.Coeff. of Radiant Power | | - 0,4 | | %/K | |
| T _{Operating} | Operating Temperature | - 25 | | 85 | °C | |
| T _{Storage} | Storage Temperature | - 25 | | 85 | °C | |
| T _{Soldering} | Soldering Temperature | | | 260 | °C | 5mm from case @ 5 sec. |
| Θ _{j-PIN} | Thermal Resistance | | 450 | | K/W | |
| P _{tot} | Total Power Dissipation | | | 230 | mW | derate above 45°C 2,5mW/K |

Order Informations :

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Bulk (1000 pcs/bag)

Fietje reserves the right to make changes at any time in order to improve design and to supply the best product possible, contact Fietje for latest device specification sheets before using.