

APW-MW2-1210-010 GaAIAs Dual IR LED



FEATURES

- Low Cost
- 660 nm \pm 3nm
- 940 nm \pm 10 nm
- Optimal Peak Wavelength Binning
- Two Drive Lines



DESCRIPTION

The **APW-MW2-1210-010** is a two drive line dual emitter oximeter component. The 660nm and 940nm GaAIAs infrared emitters are mounted in a “glob top” low cost ceramic SMT 1210 package.

APPLICATIONS

- Oximeter Probes
- Finger Clamps
- Reusable Probes

> Absolute Maximum Ratings

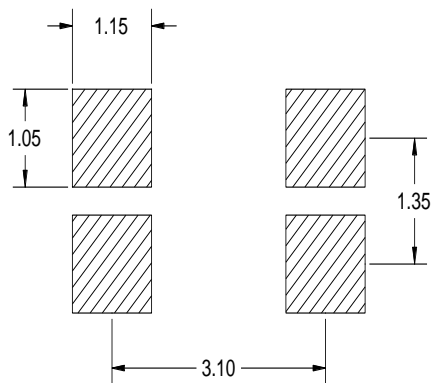
| Reverse Voltage (V) | Power Dissipation (mW) | Peak Forward Current (mA) | Continuous Forward Current (mA) | Operating Temperature (C°) | Storage Temperature (C°) | Soldering Temperature (C°) |
|---------------------|------------------------|---------------------------|---------------------------------|----------------------------|--------------------------|----------------------------|
| 4 | 250 | 200 | 30 | -40 to +80 | -40 to +80 | 260 |

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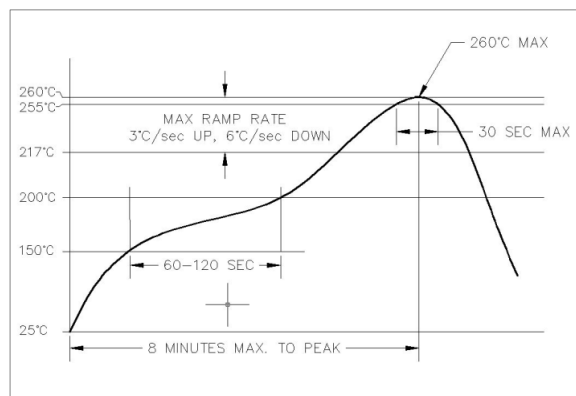
> Electrical and Optical Characteristics

| 660 nm Typical Characteristics (T=23°C unless specified) | | | | | | |
|--|------------------------|-----------------|-----|---------|------|------|
| Parameter | Test Conditions | Symbol | Min | Typical | Max | Unit |
| Breakdown Voltage | I _f = 10 μA | V _{BD} | 5 | - | - | V |
| Radiant Flux | I _f = 20 mA | Φ _e | - | 9.5 | - | mW |
| Luminous Intensity | I _f = 20 mA | I _v | - | 180 | - | mcd |
| Forward Voltage | I _f = 20 mA | V _F | - | 1.28 | 1.35 | V |
| Peak Wavelength | I _f = 20 mA | λ _p | 657 | 660 | 663 | nm |
| Rise Time (50Ω load) | I _f = 20 mA | T _R | - | 0.8 | - | ns |
| Fall Time | I _f = 20 mA | T _F | - | 0.8 | - | ns |
| Spectral Halfwidth | I _f = 20 mA | Δλ | - | 20 | - | nm |
| 940 nm Typical Characteristics (T=23°C unless specified) | | | | | | |
| Parameter | Test Conditions | Symbol | Min | Typical | Max | Unit |
| Breakdown Voltage | I _f = 10 μA | V _{BD} | 5 | - | - | V |
| Radiant Flux | I _f = 20 mA | Φ _e | - | 5 | - | mW |
| Luminous Intensity | I _f = 20 mA | I _v | - | - | - | mcd |
| Forward Voltage | I _f = 20 mA | V _F | - | 1.5 | 1.65 | V |
| Peak Wavelength | I _f = 20 mA | λ _p | 930 | 940 | 950 | nm |
| Rise Time (50Ω load) | I _f = 20 mA | T _R | - | 0.8 | - | ns |
| Fall Time | I _f = 20 mA | T _F | - | 0.8 | - | ns |
| Spectral Halfwidth | I _f = 20 mA | Δλ | - | 50 | - | nm |

> Suggested PCB Layout

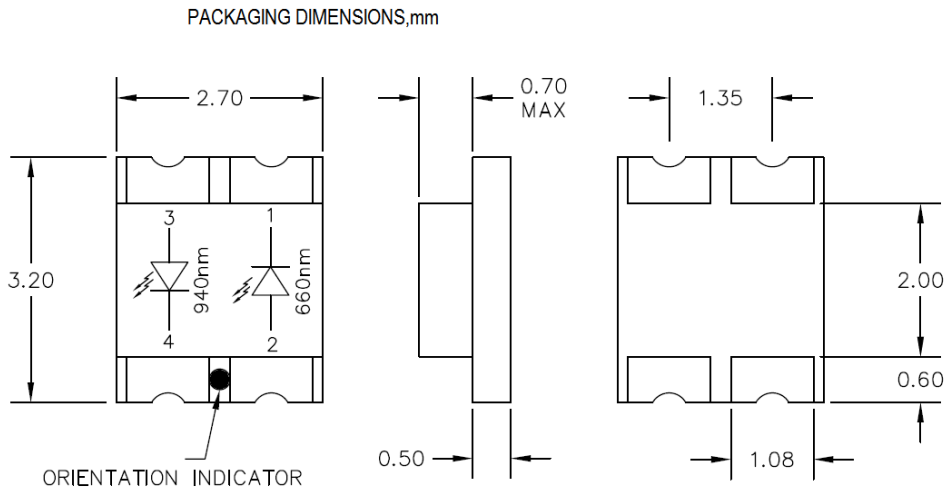


> Reflow Profile



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> Packing Dimensions



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