

APW-MW2-1210-010 GaAIAS Dual IR LED



FEATURES



- Low Cost
- 660 nm ± 3nm
- 940 nm ± 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 GaAlAs infrared emitters are mounted in a "glob top" low cost ceramic SMT 1210 package.

APPLICATIONS

- Oximeter Probes
- Finger Clamps
- Reusable Probes

> Absolute Maximum Ratings

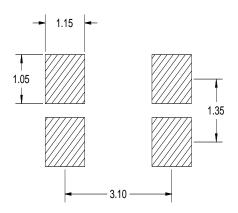
| Reverse | Power | Peak | Continuous | Operating | Storage | Soldering | |
|---------|-------------|--------------|--------------|-------------|-------------|-------------|--|
| Voltage | Dissipation | Forward | Forward | Temperature | Temperature | Temperature | |
| (V) | (mW) | Current (mA) | Current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

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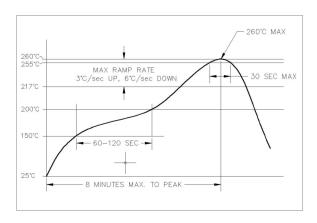
> Electrical and Optical Characteristics

| 660 nm Typical Characteristics (T=23°C unless specified) | | | | | | | | | | |
|--|------------------------|----------------|-----|---------|------|------|--|--|--|--|
| Parameter | Test Conditions | Symbol | Min | Typical | Max | Unit | | | | |
| Breakdown Voltage | $I_f = 10 \mu A$ | V_{BD} | 5 | - | - | V | | | | |
| Radiant Flux | I _f = 20 mA | Фе | - | 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 | $I_f = 10 \mu A$ | V_{BD} | 5 | - | - | V | | | | |
| Radiant Flux | I _f = 20 mA | Фе | - | 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 | | | | |
| | I _f = 20 mA | T _F | _ | 0.8 | _ | ns | | | | |
| Fall Time | ., | l IE | _ | 0.0 | _ | 113 | | | | |

> Suggested PCB Layout

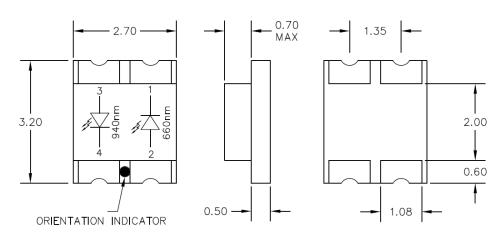


> Reflow Profile



> Packing Dimensions

PACKAGING DIMENSIONS.mm



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MATERIALS SAFETY

This product is free of conflict minerals and meets REACH compliance. Please see website for reports.