

Features

- 4x10 Gbps CWDM AWG Chips With and Without Fiber Pigtail
- Low Insertion Loss
- High Reliability
- Custom Design: chip size, optical specifications, AR coating, polishing angles
- RoHS* Compliant
- Datacom 40G CWDM4 Applications

Mechanical Specification¹

| Mechanical | Size |
|------------|-------------|
| Chip Size | 2.5 x 10 mm |
| Pitch | 250 μ m |

1. Customized size and pitch available upon request.

Optical Specifications

| Parameter | Conditions | Units | Min. | Typ. | Max. |
|--|--|-------|------|------------------------------|------|
| Number of Channels (CH) | — | — | — | 4 | — |
| Spectral Region (SR) | O-Band | nm | 1260 | — | 1360 |
| Channel Wavelengths (λ_c) | measured @ 3 dB center CH1 CH2 CH3 CH4 | nm | — | 1271 1291 1311 1331 | — |
| Channel Spacing (CS) | ITU-G.694.2 | nm | — | 20 | — |
| Passband (PB) | — | nm | — | +/-6.5 | — |
| Center Wavelength Accuracy ($\Delta\lambda$) | — | nm | — | +/-1 | — |
| Insertion Loss ² (IL) | measured within PB | dB | — | — | 3.0 |
| 1dB Bandwidth (δ_{1dB}) | 1 dB down from minimum IL | nm | — | 13 | — |
| Adjacent Channel Isolation (AX) | measured within PB | dB | 20 | — | — |
| Non-adjacent Channel Isolation (NX) | measured within PB | dB | 26 | — | — |
| Polarization Dependent Loss (PDL) | over all polarization states | dB | — | — | 0.5 |
| Polarization Mode Dispersion (PMD) | guaranteed by design | ps | — | — | 0.15 |

2. Insertion loss will be 0.5 dB higher for the fiber pigtail, from the optical specification.

Ordering Information

| Part Number | Package |
|----------------------------|-----------------|
| A0410-DXX-C-x ³ | polished chips |
| A0410-DXX-P-x ³ | pigtailed chips |

3. The -x variant will be used for customer specific specifications. Contact MACOM customer support for ordering options.

Absolute Maximum Ratings

| Parameter | Absolute Maximum |
|-----------------------|--------------------|
| Power | 300 mW, each facet |
| Operating Temperature | -5°C to +75°C |
| Storage Temperature | -40°C to +85°C |

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* Restrictions on Hazardous Substances, European Union Directive 2011/65/EU.

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