Agilecom
PHOTONICS SOLUTIONS

# DWDM Thermal AWG

Agilecom's Dense Wavelength Division Multiplexer Thermal Arrayed Waveguide Grating Module is designed for C-band release of DWDM system. To reduce the power dissipation of the device in different environments, the AWG package is specially designed with the selection of reliable thermal plastic with low thermal conduction, and the AWG operating temperature is controlled by foil resist heater or Peltier TEC with thermistor temperature sensor. Different input and output fibers, such as SM fibers, MM fibers and PM fiber, can be selected to meet different applications.




## Key Features

- High Stability and Reliability
- Low Insertion Loss
- Low Polarization Dependent Loss
- High Channel Isolation
- Muti-channel Number

## Applications

- WDM Transmission
- WDM Based ADM
- Metro and Long Haul Networks
- Wavelength Selective Routing
- Optical Signal Processing

## Specifications

| Parameters | TAWG | Unit |
|---|---|---|
| Chip Type | Flat-Top | |
| ITU Passband | ±0.1 | nm |
| Channel Spacing | 100 | GHz |
| Operating Wavelength | C15~C62 | nm |
| Number of Channels | 16,32,48 or Other | |
| Wavelength Accuracy | ≤±0.05 | nm |
| Insertion Loss | ≤6.0 | dB |
| -1dB Passband | ≥0.4 | nm |
| -3dB Passband | ≥0.6 | nm |
| Adjacent Channel Isolation | ≤6.0 | dB |
| Non-adjacent Channel Isolation | ≥30 | dB |
| Total Isolation | ≥22 | dB |

| Parameters | TAWG | Unit |
|---|---|---|
| Passband Ripple | ≤1.0 | dB |
| Polarization Dependent Loss | ≤0.5 | dB |
| Uniformity | ≤1.5 | dB |
| Directivity | ≥50 | dB |
| Return Loss | ≥40 | dB |
| Polarization Mode Dispersion | ≤0.5 | ps |
| Power Handling | ≤300 | mW |
| Fiber Type | G657A/PM | |
| Operating Temperature | -5 ~ +65 | dB |
| Storage Temperature | -40 ~ +85 | dB |

Note: Specifications include connectors.

## Order Information

TAWG—□ □□ □ □□□ □ □ □ □ □

| Code | Band |
|---|---|
| C | C-band |
| X | Customized |

| Code | Channel |
|---|---|
| 16 | 16 |
| 32 | 32 |
| 40 | 40 |
| 48 | 48 |
| 80 | 80 |
| 96 | 96 |
| XX | Customized |

| Code | Channel Spacing(GHz) |
|---|---|
| 1 | 100 |
| 2 | 200 |
| 5 | 50 |
| X | Customized |

| Code | Start Wavelength(nm) |
|---|---|
| H62 | H62 |
| C62 | C62 |
| H61 | H61 |
| C61 | C61 |
| · · · | ITU Channel |
| XXX | Customized |

| Code | Chip Type |
|---|---|
| G | Gaussian |
| B | Wide Gaussian |
| F | Flattop |

| Code | Package |
|---|---|
| M | Module |
| A | Chassis |
| X | Customized |

| Code | Fiber Length(m) |
|---|---|
| 1 | 0.5 |
| 2 | 1 |
| 3 | 1.5 |
| 4 | 2 |
| 5 | 2.5 |
| 6 | 3 |
| X | Customized |

| Code | Connector |
|---|---|
| 0 | None |
| 1 | SC/UPC |
| 2 | SC/APC |
| 3 | FC/UPC |
| 4 | FC/APC |
| 5 | LC/UPC |
| 6 | LC/APC |
| X | Customized |