

Temperature Compensated Gain Flattening Filter --TCGFF

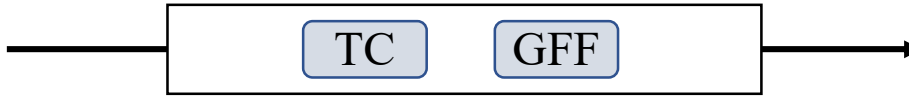
Key Features

- ✧ Passive component
- ✧ Auto temperature dependent gain compensation
- ✧ Very small size
- ✧ Cost saving



- ✧ Based on our unique passive EDFA temperature dependent gain compensation technique, the Temperature Compensator (TC) is a passive component designed to conquer the issue of EDFA temperature dependency so that the EDF heater, temperature control circuit and insulation box in conventional EDFA can be fully eliminated.
- ✧ TCGFF is a 2in1 hybrid passive component including temperature compensator and gain flattening filter

Function Diagram



General Specification

| Parameter | Specification | Unit |
|------------------------------------|------------------------|------|
| Wavelength Range | 1528-1568 1565-1617 | nm |
| Max Insertion Loss* | 0.5 | dB |
| Max Temperature Dependent Gain** | 0.3 | dB |
| GFF error function (P-P) | 0.5 | dB |
| Operating Temperature | -10-70 | °C |
| Storage Temperature | -40-85 | °C |
| Operating Humidity | 5-95 | %RH |
| Polarization Mode Dispersion (max) | 0.05 | ps |
| Polarization Dependent Loss (max) | 0.1 | dB |
| Dimension | 3x4x24 | mm |

*at the temperature the GFF is designed

**gain curve at any temperature minus gain curve at the temperature the GFF is designed

Example of EDFA gain spectrum with TDGCS

