

NEW

40Gb Components

Mitsubishi introduce the new Electro Absorption Modulated (EAM) laser FU-642SEA as well as the photodetector FU-342SPP.

The laser is packaged in an industry standard butterfly housing incorporating a laser chip with monolithically integrated EAM, a driver IC and a thermo electric cooler (TEC). In former designs the driver IC and the laser chip were individually packaged. By eliminating the need for RF cables, the optical wavefront was improved and with that the setup time was reduced. The receiving part is a photodiode with integrated limiting pre-amplifier and shows a ~50% higher responsivity than former designs, which warrants a stable transmission.

Laser Features:

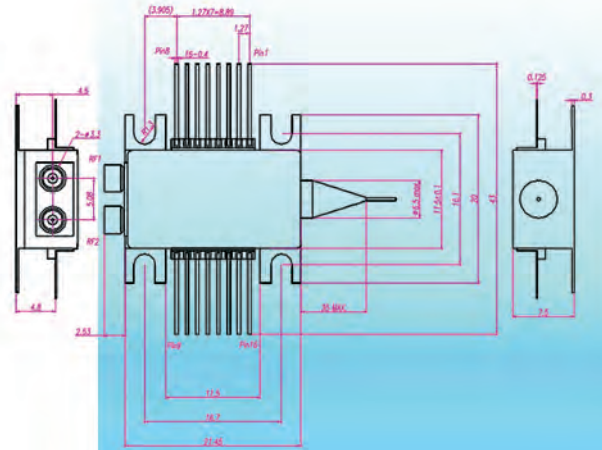
- GPP0 connectors for RF input
- 1550nm wavelength
- built-in modulator driver IC
- built-in isolator
- built-in TEC

Photodiode Features:

- GPP0 connectors for RF output
- high sensitivity (-9dBm typ)
- low preamp supply voltage (+3.3V)
- low power consumption (0.2W typ)

Application:

- 40G VSR links



NEW

1310nm Laser for up to 6GHz analog

Mitsubishi Semiconductor offer two new lasers in uncooled coaxial package with single mode fiber pigtail. The very high frequency was achieved by using a flexible printed circuit (FPC). In comparison with the common coaxial connection pins, the FPC shows no parasitic effects and a substantially better RF matching.

DFB with isolator

For longer distances we recommend the DFB laser FU-45OSDF-AW49Mx, which is equipped with an integrated isolator to avoid any feedback into the laser chip. The output power is 4mW (typ) and the operating temperature range is -20 up to +85degC. The relative intensity noise (RIN) at 6GHz is -130dB/Hz.

FP laser

The low cost alternative is the FP laser FU-47OSLD-AW49Mx with an optical output power of 3mW (typ), which is suitable for short reach applications.

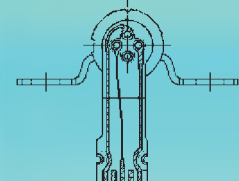
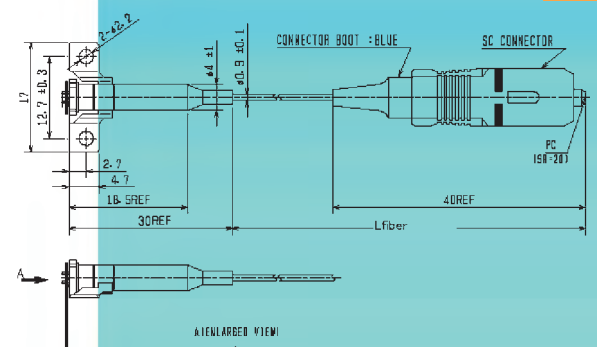
Both lasers are available with flange on request.

Features:

- high speed response
- integrated monitor photodiode
- single stage optical isolator (DFB version)

Applications:

- 4G fiber channel
- high frequency wideband video transmission



FU-470SLD-AW49M2