Green is life tmg

CONTRACTOR ESSENTIALS
ContractorEssentials.com.au
Powered by tmg

VIAVI Solutions 5G

Enabling Australia's Field Technicians to build, troubleshoot and maintain better communications networks.

VIAVI MASTER Distributor

This reference material is provided by TMG Test Equipment, VIAVI's **only** Master Distributor for Contractors in Australia

- **Industry Best Pricing**
- **Finance Available**
- **Short to Medium Project-Based Rental Solutions**
- **Dedicated Technical & After-Sales Support**
- **In-house Diagnostics, Repair & NATA Calibration Laboratory**

FREECALL 1800 680 680

MAP Erbium-Doped Fiber Amplifier

EDFA Series

For stand-alone applications, the MAP EDFA may be used as a benchtop

Key Features

- **High output power and gain**
- **Low noise figure**
- **Monitoring and alarms**

Applications

- In-line, pre-amp and booster amplifier emulation
- Dense wavelength division multiplexing (DWDM) transmission for multi-channel applications
- SONET/SDH systems for single channel applications
- Optical signal to noise ratio (OSNR) experiments

Safety Information

- This optical source cassette, when installed in the MAP chassis, complies to CE requirements plus UL3101-1 and CAN/CSA-C22.2 No.1010.1, meets the requirements of Class 3B in standard IEC 60825-1 (2002), and complies with 21 CFR 1040.1 except deviations per Laser Notice No.50, July 2001.

INVISIBLE LASER RADIATION
AVOID EXPOSURE TO BEAM
CLASS 3B LASER PRODUCT
(IEC 60825-1, 2002)
MAX. 500 mw, 700-1680 nm

The Multiple Application Platform (MAP) Erbium-Doped Fiber Amplifier (EDFA) Cassette combines the optical performance of the traditional JDSU EDFA benchtop models, with the flexibility and modularity of the MAP. Nine standard configurations are available to meet your needs. The MAP EDFA has a saturated output power ranging from 14 dBm to 21 dBm, features noise figures as low as 3.3 dB and has gain flatness better than 1.4 dB. The MAP EDFA's are available for operation in the C- or L-band.

The MAP EDFA models provide specialized variants and optical performance not available in the Benchtop EDFA line. Additional EDFA models are available in the Benchtop EDFA product line for applications requiring higher saturated power or operation in the C+L-band.

2

Specifications

Parameter	1546	1550	1552	1552	1554	1558	1590	1592	1594
Amplifier type	Mid-span access booster DWDM	Pre-amp	Booster	Booster high power	In-line	Booster DWDM	Pre-amp	Booster	In-line
Operating wavelength range	1540 to 1560 nm	1528 to 1565 nm	1528 to 1565 nm	1528 to 1565 nm	1528 to 1565 nm	1528 to 1563 nm	1565 to 1610 nm	1565 to 1610 nm	1565 to 1610 nm
Input signal	Multichannel (DWDM)	Single channel	Single channel	Single channel	Single channel	Multichannel (DWDM)	Single Channel	Single Channel	Single Channel
Saturated output power (minimum)[1]	≥ 17 dBm	≥14 dBm	≥17 dBm	≥ 20 dBm	≥ 17 dBm	≥ 21 dBm	≥ 15 dBm	≥ 15 dBm	≥ 20 dBm
Noise figure (maximum)[2]	≤ 5.5 dB	≤ 3.3 dB	≤ 4.5 dB	≤ 5.0 dB	≤ 3.8 dB	≤ 5.5 dB	≤ 5.0 dB	≤ 5.5 dB	≤ 5.5 dB
Small signal gain (minimum)[3]	≥ 23 dB (MS loss ≤ 10 dB)	≥ 37 dB	≥ 30 dB	≥ 32 dB	≥ 35 dB	≥ 25 dB	≥ 24 dB	≥ 22 dB	≥ 28 dB
Input/output monitors	Yes	No	Yes	Yes	No	Yes	No	Yes	Yes
Polarization dependent loss (PDL) (maximum)	≤ 0.3 dB	≤ 0.2 dB	≤ 0.2 dB	≤ 0.2 dB	≤ 0.2 dB	≤ 0.25 dB	≤ 0.3 dB	≤ 0.3 dB	≤ 0.3 dB
Polarization mode dispersion (PMD) (maximum)	≤ 0.6 ps	≤ 0.5 ps	≤ 0.4 ps	≤ 0.4 ps	≤ 0.5 ps	≤ 0.65 ps	≤ 0.6 ps	≤ 0.6 ps	≤ 0.6 ps
Input/output isolation (typical)	32/32 dB	N/A/32 dB	45/32 dB	45/32 dB	32/32 dB	32/32 dB	N/A/40 dB	40/40 dB	40/40 dB
Spectral gain flatness (maximum) (p-p)[4]	≤ 1.6 dB	N/A	N/A	N/A	N/A	≤ 1.4 dB	N/A	N/A	N/A
Operating temperature	0 to 40 °C								
Storage temperature	-30 to 60 °C								
Humidity	Maximum 95% RH non-condensing from 0 to 45 °C								
Dimensions (W x H x D)	4.06 x 13.24 x 39.5 cm								
Weight	2.3 kg								

Note: All specifications guaranteed at 1550 nm and at 23 °C.

1. Saturated Output Power measured:
   at 1550 nm at P_{in} = -4 dBm
   at 1550 nm at P_{in} = -6 dBm for model 1546
   at 1550 nm at P_{in} = -4 dBm (mid-span) for models 1550, 1552, 1554, 1558
   at 1590 nm at P_{in} = -4 dBm (mid-span) for models 1590 , 1592, 1594
2. Noise figure measured:
   at P_{in} = -6 dBm (pre-amp) for model 1546
   at P_{in} = -30 dBm for model 1550
   at P_{in} = -4 dBm for models 1552,1558,1592
   at P_{in} = -20 dBm for models 1554, 1590, 1594
3. Small signal gain measured:
   at Pin = -6 dBm for model 1546
   at P_{in} = -30 dBm for model 1550
   at P_{in} = -20 dBm for model 1552,1554,1590,1592,1594
   at P_{in} = -4 dBm for model 1558
4. Flatness optimized:
   for P_{in} = -4 dBm for model 1558
   for P_{in} = -6 dBm for model 1546

Ordering Information

For more information on this or other products and their availability, please contact your local JDSU account manager or JDSU directly at 1-800-498-JDSU (5378) in North America and +800-5378-JDSU worldwide or via e-mail at customer.service@jdsu.com.

Sample: MAPO+1E15520FP20

MAPO+1E □□□□ □ □□ □ **0**

Code	Description
1546	Mid-span access booster
1550	C-Band Pre-amp
1552	C-Band Booster
1554	C-Band In-line
1558	Booster DWDM
1590	L-Band Pre-amp
1592	L-Band Booster
1594	L-Band In-line

Code	Characteristics
0	Unflattened
2	Flattened (1546 and 1558 only)

Code	Connector Type
FP	FC/PC
FA	FC/APC

Code	Output Power
0	Standard output power
2	Booster high output power, 20 dBm (available for 1552 only)

Code	Characteristics
0	Standard

Test & Measurement Regional Sales

NORTH AMERICA
TEL: 1 866 228 3762
FAX: +1 301 353 9216

LATIN AMERICA
TEL: +55 11 5503 3800
FAX: +55 11 5505 1598

ASIA PACIFIC
TEL: +852 2892 0990
FAX: +852 2892 0770

EMEA
TEL: +49 7121 86 2222
FAX: +49 7121 86 1222

WEBSITE: www.jdsu.com