

### 10100246

# Fast Diode Current Modulator FM 3,5 Optimized for Lumics Diode Lasers in TO-packages

#### **Features**

Optimized for Lumics Diode Lasers or any other laser in a TO-Package

Drives arbitrary current waveforms, CW, pulsed,

modulated or mixed

Enhanced optical performance

Short rise and fall time

Frequency up to 40 MHz

Two analog inputs Small dimensions



## **Specification**

Diode current 0 ... 3.5 A
Diode voltage 0 ... 4.5 V
Output power 16 W max

Power dissipation 30 W max allowed

Supply voltage 3 V ... 6 V
Supply current 4 A max
Rise time 15 ns
Fall time 9 ns

Frequency 40 MHz max

Inputs

Diode current set point 1 0 ... 500 mV (50 Ohm input)
Diode current set point 2 0 ... 5 V (high impedance)

Enable TTL Reset TTL

**Outputs** 

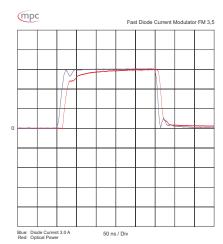
Diode current monitor 0 ... 219 mV (into 50 Ohm) Temperature 0 ... 4 V for 0 ... 80°C

Ready TTL Excess Temperature TTL

General specifications

Ambient temperature 0 ... +45 °C
Cooling Required
Dimensions 95 x 61 x 20 mm

Weight 250 g Ordering Code 10100246



## **Description**

The fast diode current modulator FM 3,5 (10100246) is a linear current modulator optimized for driving arbitrary current waveforms into Lumics Diode Lasers or any other diode laser in a TO-Package. Current waveforms can be CW, pulsed, modulated or mixed with frequencies up to 40 MHz and currents up to 3.5 A.

The FM 3.5 is small and compact and it is designed for mounting it with low inductance directly at the TO-package.

The FM 3.5 has two analogue inputs for the current setpoint, a high frequency input

(50 Ohm input impedance) with a bandwidth of 40 MHz and a low frequency input with a bandwidth of 100 KHz. Both inputs cover the full current range.

Additionally there is a 10 turns potentiometer for generating a CW-current (bias current). All set points are added and build the effective current set point.

For detailed information see operating manual or visit our website.

