

**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.

