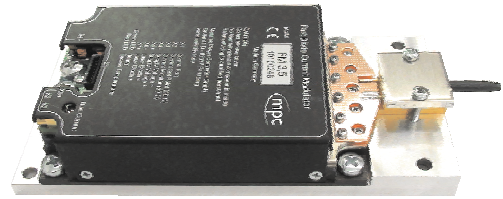


**Features**

Optimized for Lumics Diode Lasers or any other lasers in TO-Packages  
 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 ... 4 A
Diode voltage	0 ... 4.5 V
Output power	18 W max
Power dissipation	30 W max allowed
Supply voltage	3 V ... 6 V
Supply current	4.5 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 ... 222 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	10100247

**Description**

The fast diode current modulator FM 4 (10100247) is a linear current modulator optimized for driving arbitrary current waveforms into Lumics Diode Lasers or any other diode laser in TO-Packages. Current waveforms can be CW, pulsed, modulated or mixed with frequencies up to 40 MHz and currents up to 4 A.

The FM 4 is small and compact and it is designed for mounting it with low inductance directly at the TO-Package.

The FM 4 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.

