

10100340

# FM 20-25 High Voltage Fast Diode Current Modulator

## Features

Drives arbitrary current waveforms into high voltage, high power laser diodes CW, pulsed, modulated or mixed Short rise and fall time Frequency up to 20 MHz Excellent dynamic performance Two analog inputs Small dimensions

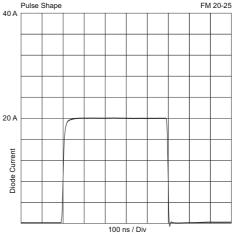
### Specification

Diode current
Diode current pulsed
Diode voltage
Output power
Power dissipation
Supply voltage
Supply current
Supply voltage*
Rise time
Fall time
Frequency
Inputs
Diode current set point 1
Diode current set point 2
Enable
Reset
Outputs
Diode current monitor
Temperature
Ready
Excess Temperature

0...20A 0 ... 40 A (short pulses) 0....24 V 480 W max 30 W max allowed 1 V ... 25 V 20 A max 3 V ... 6 V 16 ns 9 ns 20 MHz max 0 ... 500 mV (50 Ohm input) 0 ... 5 V (high impedance) TTL TTL 0 ... 50 mV (into 50 Ohm) 0 ... 4 V for 0 ... 80°C

x 20 mm





### **General specifications**

Ambient temperature	0 +45 °C
Cooling	Required
Dimensions	95 x 61 x 20
Weight	250 g
Ordering Code	10100340

\* for internal electronics

## Description

The fast diode current modulator FM 20-25 is a linear modulator for driving arbitrary current waveforms into high voltage, high power laser diodes.

Current waveforms can be CW, pulsed, modulated or mixed with frequencies up to 20 MHz and currents up to 20 A for CW and 40 A for pulsed waveforms.

The FM 20-25 is small and compact and it is designed for mounting it with low inductance directly at laser diodes or for integrating it in laser diode modules.

The FM 20-25 has two analogue inputs for the current setpoint, a high frequency input (50 Ohm input impedance) with a bandwidth of 20 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.

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