

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
- Enhanced optical performance
- Two analog inputs
- Trigger input
- Small dimensions



Specification

Diode current	0 ... 20 A
Diode current pulsed	0 ... 40 A (short pulses)
Diode voltage	0 ... 24 V
Output power	480 W max
Power dissipation	30 W max allowed
Supply voltage	1 V ... 25 V
Supply current	20 A max
Supply voltage*	3 V ... 6 V
Rise time	28 ns
Fall time	32 ns
Frequency	20 MHz max

Inputs

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

Outputs

Diode current monitor	0 ... 110 mV (into 50 Ohm)
Temperature	0 ... 4 V for 0 ... 80°C
Ready	TTL

General specifications

Ambient temperature	0 ... +45 °C
Cooling	Required
Dimensions	95 x 61 x 20 mm
Weight	250 g
Ordering Code	10100371

* for internal electronics

Description

The fast diode current modulator VFM 20-25 is a linear modulator with improved properties for driving arbitrary current waveforms or fast pulses into 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 VFM 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 VFM 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 TTL-Trigger input which acts at the high frequency input for generating fast and clean pulses.

For detailed information see operating manual or visit our website.

