

Features

Drives arbitrary current waveforms into 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 ... 60 A
Diode current pulsed	0 ... 120 A (short pulses)
Diode voltage	0 ... 4.5 V
Output power	270 W max
Power dissipation	90 W max allowed
Supply voltage	3 V ... 6 V
Supply current	60 A max
Rise time	28 ns
Fall time	32 ns
Frequency	20 MHz max

Inputs

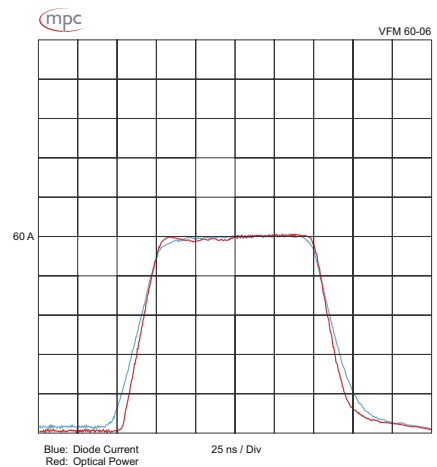
Diode current set point 1	0 ... 500 mV (50 Ohm input)
Diode current set point 2	0 ... 5 V (high impedance)
Trigger	TTL
Enable	TTL
Reset	TTL

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	260 g
Ordering Code	10100355



Description

The fast diode current modulator VFM 60-06 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 60 A for CW and 120 A for pulsed waveforms. The VFM 60-06 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 60-06 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.