

10100440

MSM 20-06 Medium Speed Current Modulator

Features

Drives arbitrary current waveforms into laser diodes

CW, pulsed, modulated or mixed

Excellent dynamic performance

Two analog inputs Small dimensions



Specification

Diode current 0 ... 20 A
Diode voltage 0 ... 5 V
Output power 100 W max

Power dissipation 30 W max allowed

 $\begin{array}{lll} \text{Supply voltage} & 3 \text{ V } ... \text{ 6 V} \\ \text{Supply current} & 21 \text{ A max} \\ \text{Rise time} & 9 \, \mu \text{s} \\ \text{Fall time} & 11 \, \mu \text{s} \\ \text{Bandwidth} & 50 \text{ KHz} \end{array}$

Inputs

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

input)

Enable TTL Reset TTL

Outputs

Diode current monitor 0 ... 50 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 275 g Ordering Code 10100440

Description

The medium speed current modulator MSM 20-06 is a linear modulator which is well suited for driving arbitrary current waveforms into laser diodes.

Current waveforms can be CW, pulsed, modulated or mixed with a bandwidth of up to 50 KHz and currents up to 20 $\rm A$.

The MSM 20-06 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 MSM 20-06 has two analogue inputs for the current setpoint, a 50 Ohm input with a bandwidth of 50 KHz and a high impedance input with a bandwidth of 50 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.