MESSTEC Power Converter GmbH

Data Sheet
Diode Driver D 1900-80-A

Features
Driver for laser diodes
High accuracy
High current stability
Very low ripple current
Excellent dynamic performance
No overshoot, no ringing
High output impedance
Included: air cooling system

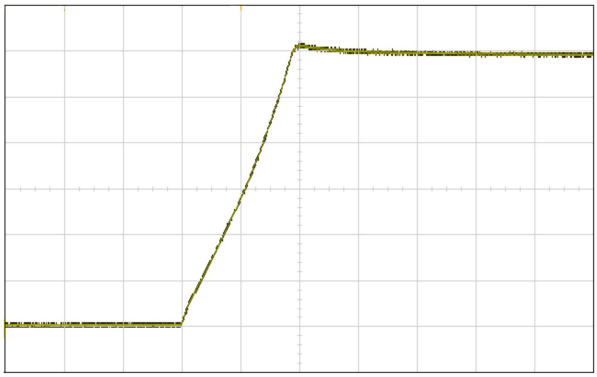
Specification Diode Unit

Diode current	2A.....80A
Diode voltage	0V.....26V
Supply voltage	15V...29V
Output power	1900W max.
Accuracy	± 1%
Temperature stability	50ppm / °C
Current ripple	<1%
Settling time	<1ms
Rise time	<200µs
Diode current monitor	0V...5V≙0A...80A
Diode voltage monitor	0V...5V≙0V...26V
Auxiliary voltage outputs	+5.1V (max. 200 mA), +15V, -15V (max. 200mA each)
Reference voltage output	+5V (max. 2mA)

Signal Inputs / Outputs

Diode current set point 1	0V...5V
Diode current set point 2	0V...5V
Shut Down	Open Collector / TTL
Diode current monitor	0V...5V
Ready	Open Collector

80A



100µs / Div

General Specifications

Temperature range	0...+45°C
Cooling system	Air
Dimensions (incl. heatsink)	235 x 88 x 94mm
Weight	2.25kg
Ordering Code	10100223

Description
The D 1900-80-A is a high-precision air-cooled laser diode driver.
This technology has a lot of advantages and is particularly suited for driving laser diodes.
It offers high accuracy and current stability, excellent dynamic performance, high output impedance and low electromagnetic interference.
No current overshoot or ringing arise when altering output current or when load impedance changes abruptly.
Two operating modes are available, mode Laser On/Off and mode Auto On.
The device is well suited to build up laser systems, which are controlled manually, by microcontroller system or PLC system.

Warning!
Risk of exposure of hazardous laser radiation
in combination with laser light emitting devices!

Technical subjects to change without notice.