

**Features**

Drives arbitrary current waveforms into high voltage laser diodes  
 CW, pulsed, modulated or mixed  
 Excellent dynamic performance  
 Two analog inputs  
 Small dimensions


**Specification**

Diode current	0 ... 40 A
Diode voltage	0 ... 24 V
Output power	960 W max
Power dissipation	90 W max allowed
Supply voltage	1 V ... 25 V
Supply current	40 A max
Supply voltage*	3 V ... 6 V / 0.5 A
Rise time	5 $\mu$ s
Fall time	7 $\mu$ s
Bandwidth	100 KHz

**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	10100451

\* for internal electronics

**Description**

The medium speed current modulator MSM 40-25 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 100 KHz and currents up to 40 A.

The MSM 40-25 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 MSM 40-25 has two analogue inputs for the current setpoint, a 50 Ohm input with a bandwidth of 100 KHz and a high impedance 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.