

ANALOG PULSE LASER DIODE DRIVER
PULSE DRIVER – OEM MODULE

Release: V1.0 | Author: MM | Date: 12/05/2016

MODEL NO

PSLD-OEM

DESCRIPTION:

The PSLD-OEM is an OEM analog pulse laser diode driver, ideal for driving 14 pin butterfly packaged laser diode modules with TEC (other packages may be included). The PSLD-OEM is integrated with a LD (FP, DFB, DBR, etc.) SOA or SLD that can be selected by the customer. The devices are sourced from industry leading manufacturers and offer proven reliability and performance. Current/temperature control circuits and safety limits are pre-set and optimized to ensure the highest level of performance in pulsed mode. An optional output optical isolator can be included.

**SPECIFICATIONS**

Parameter	Specification	Unit
Wavelength 1	375 – 1650	nm
Pulse width 2	5 – 500	ns
Pulse repetition frequency	Single-shot to 500	kHz
Modulation voltage	0 – 2	V
Peak power	up to 1W	-
Bias current	0 – 100	mA
TEC current	-1.2 – 1.2	A

⁽¹⁾ customer selected. Suggest your laser diode or ask MWTech for available alternatives.⁽²⁾ rise time depend on device bandwidth.**OPTICAL CONNECTIONS**

Fiber output type	PMF or SMF, 900um buffer
Connector type	FC/APC or other

PULSE MODULATION CONNECTION

Connector	Specification	Unit
Pulse modulation connector	SMA 50Ω	-
Center pin	0 – 2	V
Shield	0 = GND	V

ELECTRICAL PARAMETERS (AT 25°C)

Parameter	Specification	Unit
DC Power supply	+5 or +7.5	V
Power consumption	< 1	W

CW LASER DIODE DRIVER FOR 14-PIN BUTTERFLY PACKAGED DEVICES

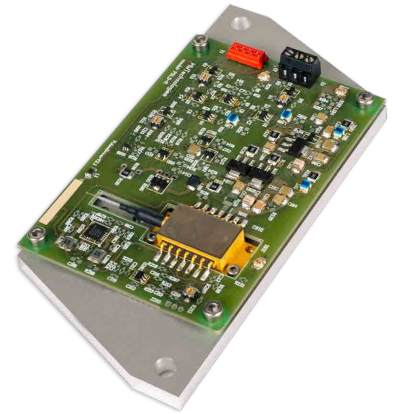
Release: V1.0 | Author: MM | Date: 12/05/2016

MODEL NO

PSLD-OEM

DESCRIPTION:

The PSLD-OEM is an OEM analog pulse laser diode driver, ideal for driving 14 pin butterfly packaged laser diode modules with TEC (other packages may be included). The PSLD-OEM is integrated with a LD (FP, DFB, DBR, etc.) SOA or SLD that can be selected by the customer. The devices are sourced from industry leading manufacturers and offer proven reliability and performance. Current/temperature control circuits and safety limits are pre-set and optimized to ensure the highest level of performance in pulsed mode. An optional output optical isolator can be included.



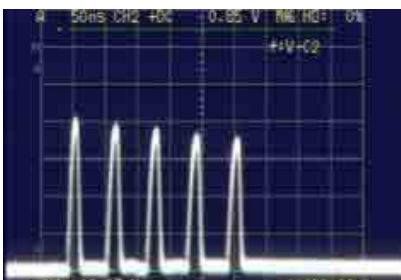
MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS

Parameter	Specification	Unit
Operating case temperature	5 - 55	C
Storage temperature	-5 - 75	C
Humidity	0 - 95, Non-condensing	%
Dimensions (WxDxH)	120 x 90 x 15	mm

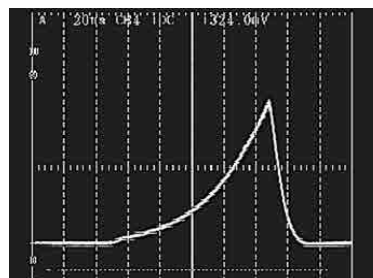
SEEDER INTEGRATION EXAMPLES

Device wavelength	Peak Power	Unit
1030 - 1080 nm FP or DFB	up to 1200	mW
1530 - 1570 nm FP or DFB	up to 300	mW

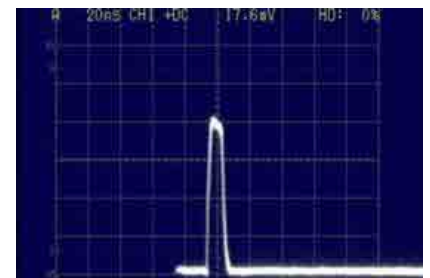
PULSING APPLICATION EXAMPLES



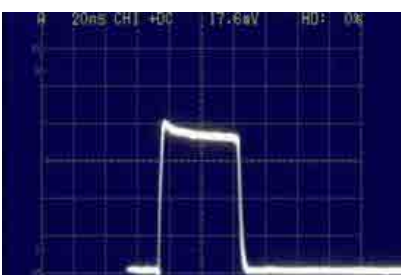
Burst of 10ns pulses



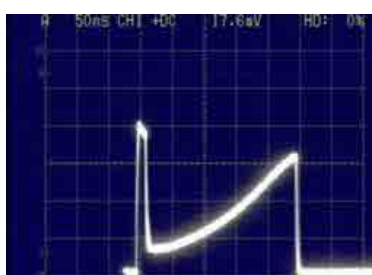
Predistorted 100ns pulse



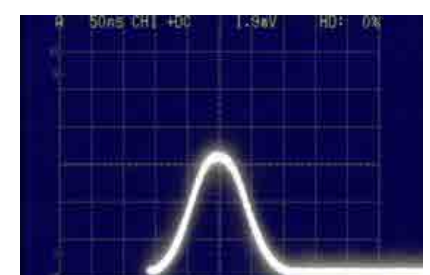
5ns pulse



50ns rectangular pulse



Multi-predistorted 250ns pulse



Gaussian 100ns pulse

FULLY COMPATIBLE WITH MWTECH PSL-AWG: PULSE SEED LASER CONTROL INTERFACE / ARBITRARY WAVEFORM GENERATOR