

Butterfly Laser Diode Mount User Guide

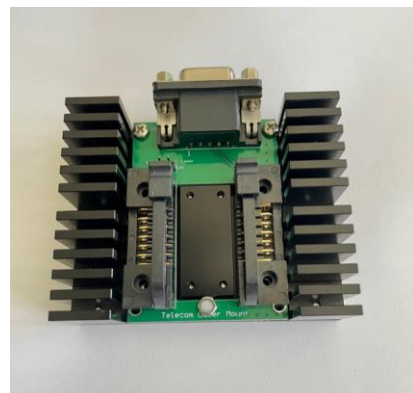
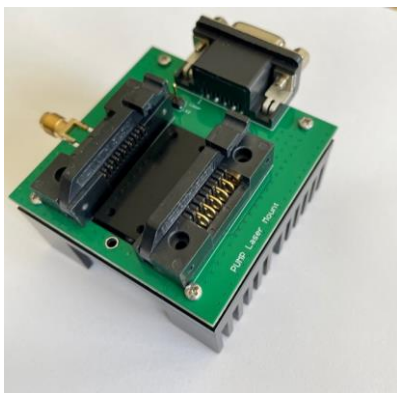
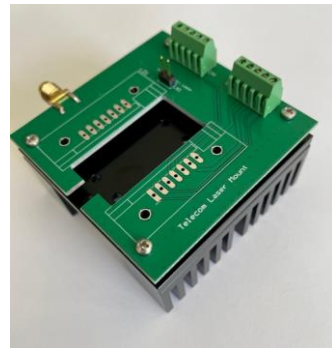
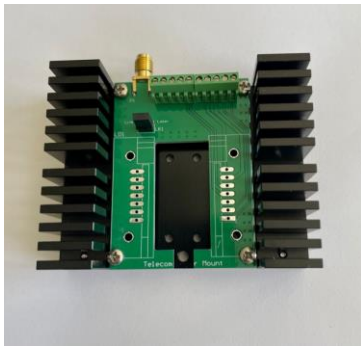
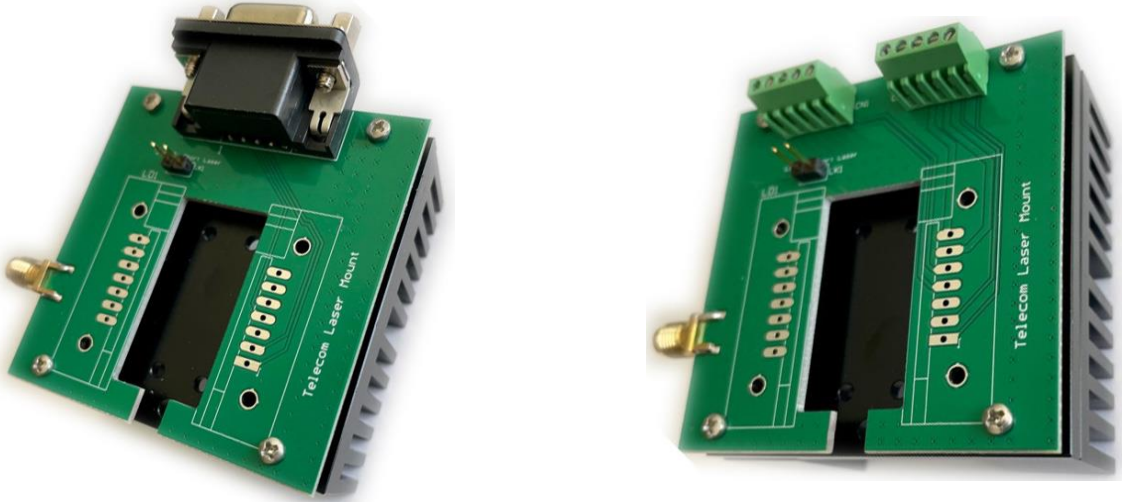


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MOT300S T/P & MOT300D T/P



Descriptions:

The MOT300X series are Laser mounts for OEM applications where the laser butterfly package will be soldered on board. Two versions, screw terminal and D-Sub connectors provide convenient connections to the laser driver and TEC controller boards of your choice. The heatsinks are custom precision designed and manufactured to accommodate moderate to high dissipations. They include Bias-T network to allow direct RF modulations up to 1000MHz. A high frequency inductor is included to provide RF coupling to the laser current. A two pin link is included that short circuit the laser diode, keeping it protected when disconnected from the driver. There are four versions in this series:

Part #	Connector & Laser configurations
MOT300S_P	Screw terminal, Type 1 (Pump) laser, No ZIF socket
MOT300S_T	Screw terminal, Type 2 (telecom) laser, No ZIF socket
MOT300D_P	D-Sub connector, Type 1 (Pump) laser, No ZIF socket
MOT300D_T	D-Sub connector, Type2 (Telecom) laser, No ZIF socket

Type1 (Pump) laser
Pin Out definitions:

Laser Pin	
Pin #	Description
1	TEC+
2	Thermistor
3	Photodiode Anode
4	Photodiode Cathode
5	Thermistor
6	NC (No Connect)
7	Photodiode Cathode
8	Photodiode Anode
9	Laser Cathode
10	Laser Anode
11	Laser Cathode
12	NC
13	Case, Ground
14	TEC -

Type2 (Telecom) laser Pin Out
definitions:

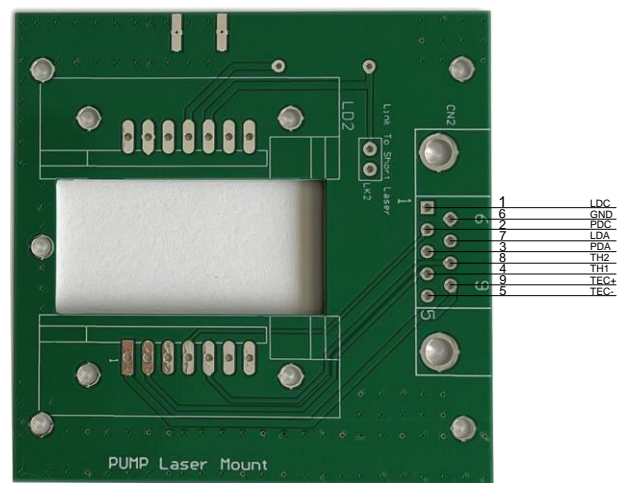
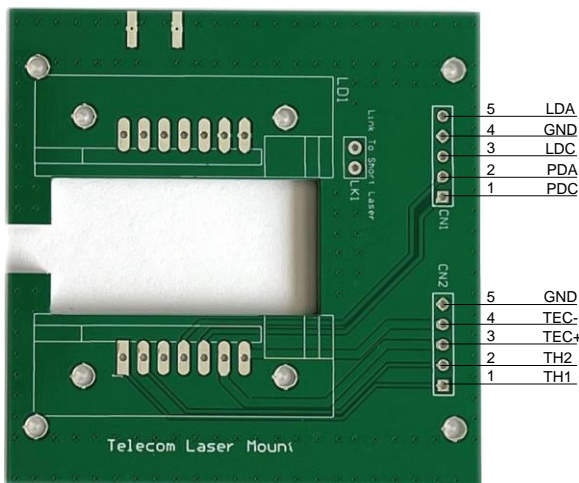
Laser Pin	
Pin #	Description
1	Thermistor
2	Thermistor
3	Laser Cathode
4	Photodiode Anode
5	Photodiode Cathode
6	TEC+
7	TEC-
8	Case (Ground)
9	Case (Ground)
10	NC
11	Laser Anode
12	NC
13	Laser Anode
14	NC

MOT300S_P & MOT300S_T

CN1 Pin #	CN1 Pin Name	CN2 Pin #	CN2 Pin Name
1	PDC	1	TH1
2	PDA	2	TH2
3	LDC	3	TEC+
4	GND	4	TEC-
5	LDA	5	GND

MOT300D_P & MOT300D_T

CN2 Pin #	CN2 Pin Name	CN2 Pin #	CN2 Pin Name
1	LDC	6	GND
2	PDC	7	LDA
3	PDA	8	TH2
4	TH1	9	TEC+
5	TEC-	Shell	GND



MOT300S_T & MOT300S_P:

CN1 & CN2 Pin Connections are the same for both type1 and Type2 lasers.

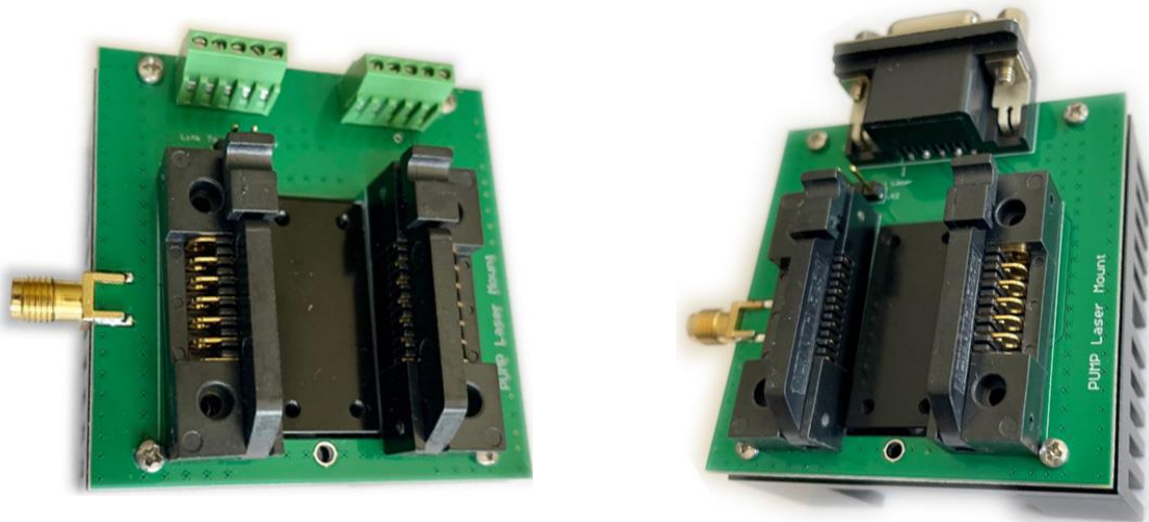
MOT300D_T & MOT300D_P:

CN2 Pin Connections are the same for both type1 and Type2 lasers.

MOT301S T/P & MOT301D T/P

Descriptions:

The MOT301X series are Laser mounts for OEM applications where the laser butterfly package will be placed in a ZIF socket. Two versions, screw terminal and D-Sub connectors provide convenient connections to the laser driver and TEC controller boards of your choice. The heatsinks are custom precision designed and manufactured to accommodate moderate to high dissipations. They include Bias-T network to allow direct RF modulations up to 1000MHz. A high frequency inductor is included to provide RF coupling to the laser current. A two pin link is included that short circuit the laser diode, keeping it protected when disconnected from the driver. There are four versions in this series:



Part #	Connector & Laser configurations
MOT301S_P	Screw terminal, Type 1 (Pump) laser, with ZIF socket
MOT301S_T	Screw terminal, Type 2 (telecom) laser, with ZIF socket
MOT301D_P	D-Sub connector, Type 1 (Pump) laser, with ZIF socket
MOT301D_T	D-Sub connector, Type2 (Telecom) laser, with ZIF socket

MOT301S_T & MOT301S_P:

CN1 & CN2 Pin Connections are the same as in MOT300S_T and MOT300S_P

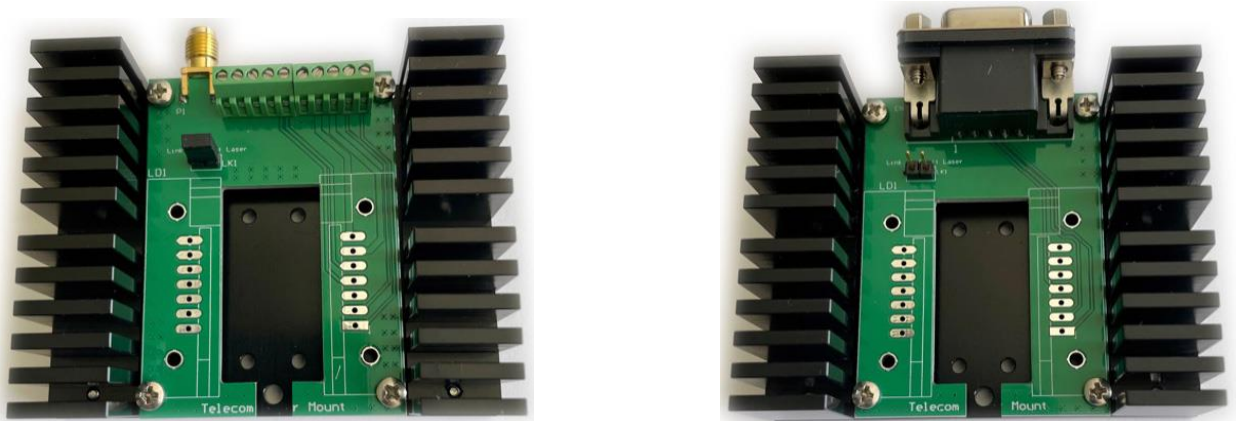
MOT301D_T & MOT301D_P:

CN2 Pin Connections are the same as in MOT300D_T and MOT300D_P

MOT302S T/P & MOT302D T/P

Descriptions:

The MOT302X series are Laser mounts for OEM applications where the laser butterfly package will be soldered on board. Two versions, screw terminal and D-Sub connectors provide convenient connections to the laser driver and TEC controller boards of your choice. The heatsinks are custom precision designed and manufactured to accommodate moderate to high dissipations. They include Bias-T network to allow direct RF modulations up to 1000MHz. A high frequency inductor is included to provide RF coupling to the laser current. A two pin link is included that short circuit the laser diode, keeping it protected when disconnected from the driver. There are four versions in this series:

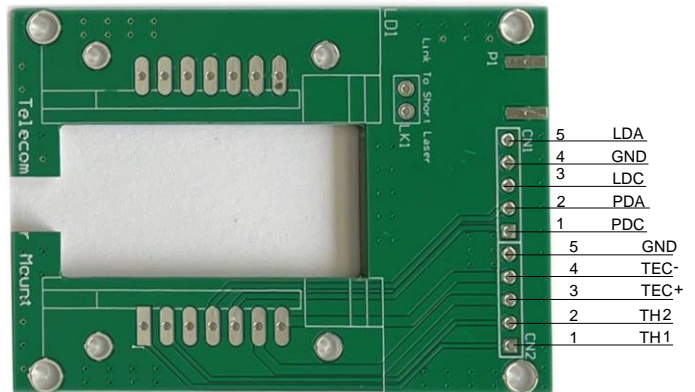


Part #	Connector & Laser configurations
MOT302S_P	Screw terminal, Type 1 (Pump) laser, no ZIF socket
MOT302S_T	Screw terminal, Type 2 (telecom) laser, no ZIF socket
MOT302D_P	D-Sub connector, Type 1 (Pump) laser, no ZIF socket
MOT302D_T	D-Sub connector, Type2 (Telecom) laser, no ZIF socket

MOT302S_P/T & MOT302D_P/T Pin out definitions:

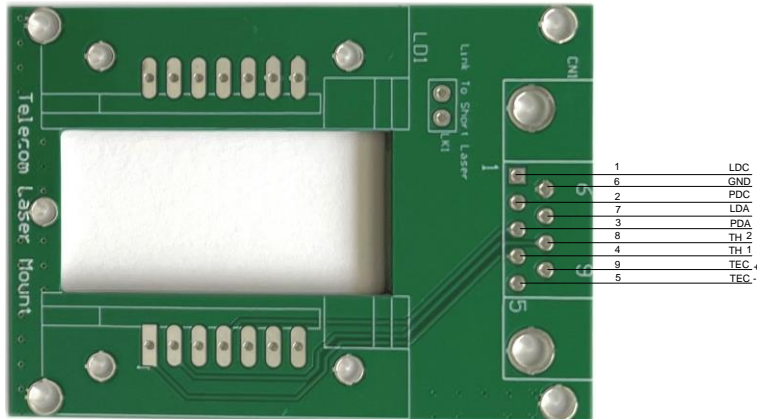
MOT300S_P & MOT300S_T

CN1 Pin #	CN1 Pin Name	CN2 Pin #	CN2 Pin Name
1	PDC	1	TH1
2	PDA	2	TH2
3	LDC	3	TEC+
4	GND	4	TEC-
5	LDA	5	GND



MOT300D_P & MOT300D_T

CN2 Pin #	CN2 Pin Name	CN2 Pin #	CN2 Pin Name
1	LDC	6	GND
2	PDC	7	LDA
3	PDA	8	TH2
4	TH1	9	TEC+
5	TEC-	Shell	GND



Part #	Connector & Laser configurations
MOT302S_P	Screw terminal, Type 1 (Pump) laser, no ZIF socket
MOT302S_T	Screw terminal, Type 2 (telecom) laser, no ZIF socket
MOT302D_P	D-Sub connector, Type 1 (Pump) laser, no ZIF socket
MOT302D_T	D-Sub connector, Type2 (Telecom) laser, no ZIF socket

MOT302S_T & MOT302S_P:

CN1 & CN2 Pin Connections are the same for both type1 and Type2 lasers.

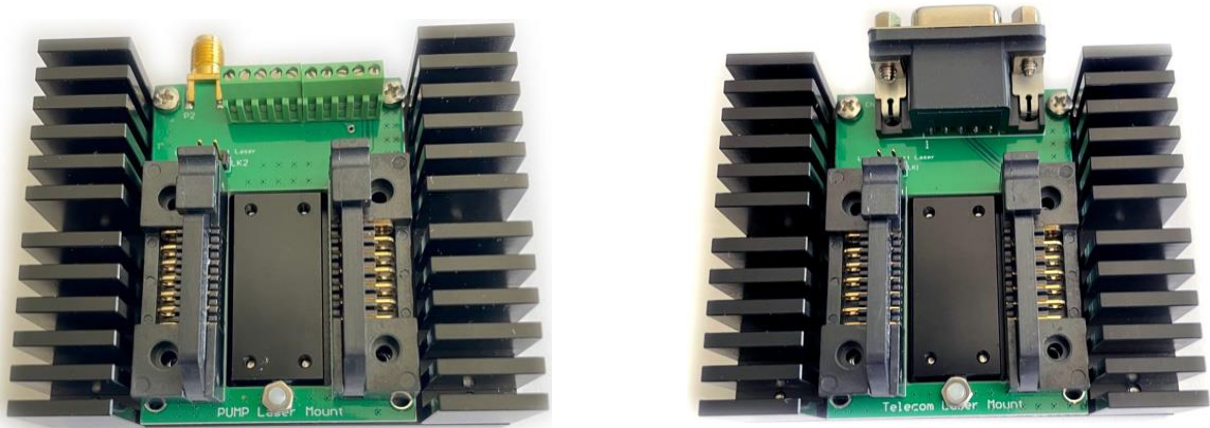
MOT302D_T & MOT302D_P:

CN2 Pin Connections are the same for both type1 and Type2 lasers.

MOT303S T/P & MOT303D T/P

Descriptions:

The MOT303X series are Laser mounts for OEM applications where the laser butterfly package will be placed in a ZIF socket. Two versions, screw terminal and D-Sub connectors provide convenient connections to the laser driver and TEC controller boards of your choice. The heatsinks are custom precision designed and manufactured to accommodate moderate to high dissipations. They include Bias-T network to allow direct RF modulations up to 1000MHz. A high frequency inductor is included to provide RF coupling to the laser current. A two pin link is included that short circuit the laser diode, keeping it protected when disconnected from the driver. There are four versions in this series:



Part #	Connector & Laser configurations
MOT303S_P	Screw terminal, Type 1 (Pump) laser, with ZIF socket
MOT303S_T	Screw terminal, Type 2 (telecom) laser, with ZIF socket
MOT303D_P	D-Sub connector, Type 1 (Pump) laser, with ZIF socket
MOT303D_T	D-Sub connector, Type2 (Telecom) laser, with ZIF socket

MOT303S_T & MOT303S_P:

CN1 & CN2 Pin Connections are the same as in MOT302S_T and MOT302S_P

MOT303D_T & MOT303D_P:

CN2 Pin Connections are the same as in MOT302D_T and MOT302D_P

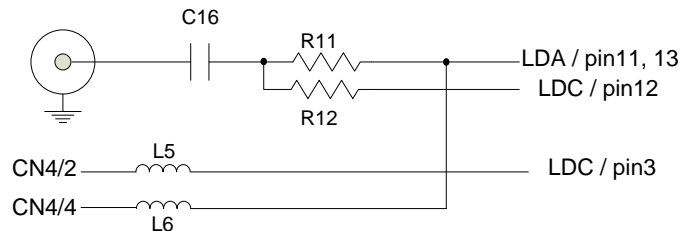
RF modulation and Bias-T network:

All MOT300 series are equipped with an SMA connector for RF modulations. Bias-T network is included to facilitate direct modulations of the laser current. Component footprints are placed on board so that customers specific requirements can be implemented. A suitable external modulation drive circuit has to be used to interface with this board.

For laser packages with internal Bias-T network, 0Ω resistors is used to directly connect to laser package. These laser mounts can be configured for both GC and GA operations.

Contact factory to suitably populate Bias-T network for your application.

Schematic



For GC configuration: R12 & L5 are not installed. LDC is Gronded

For GA configuration: R11 & L6 are not installed. LDA is Gronded

Contact Information:

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