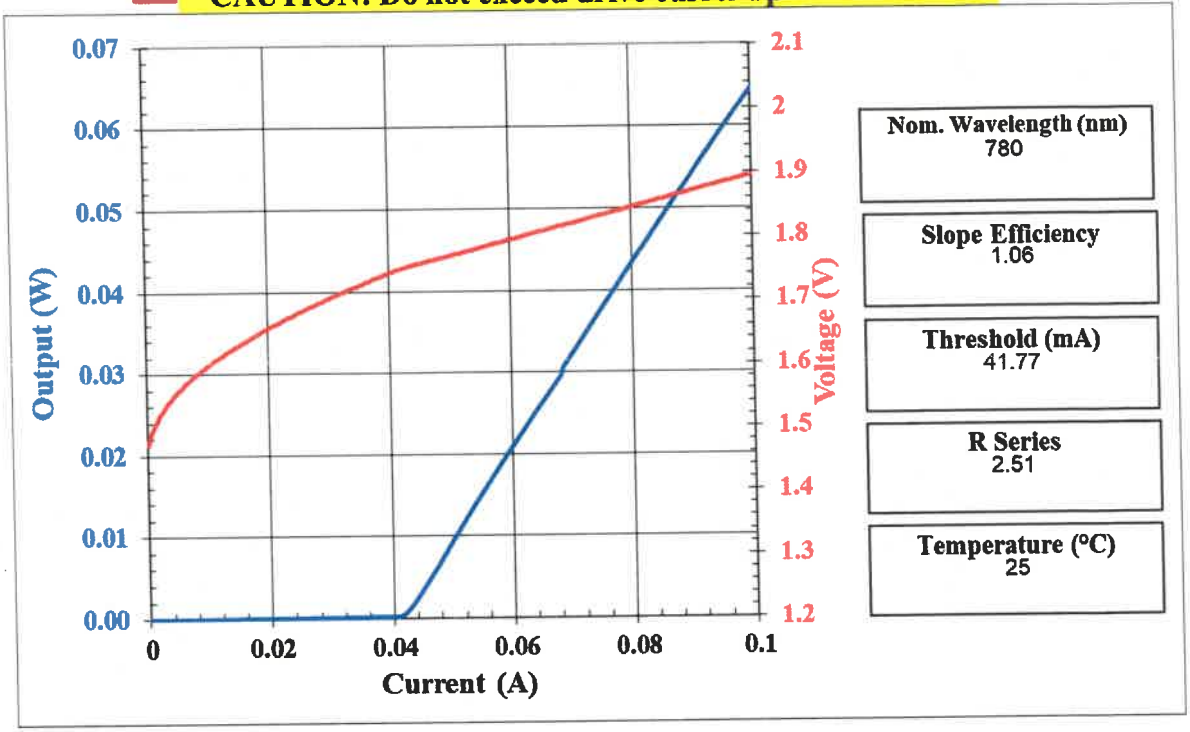
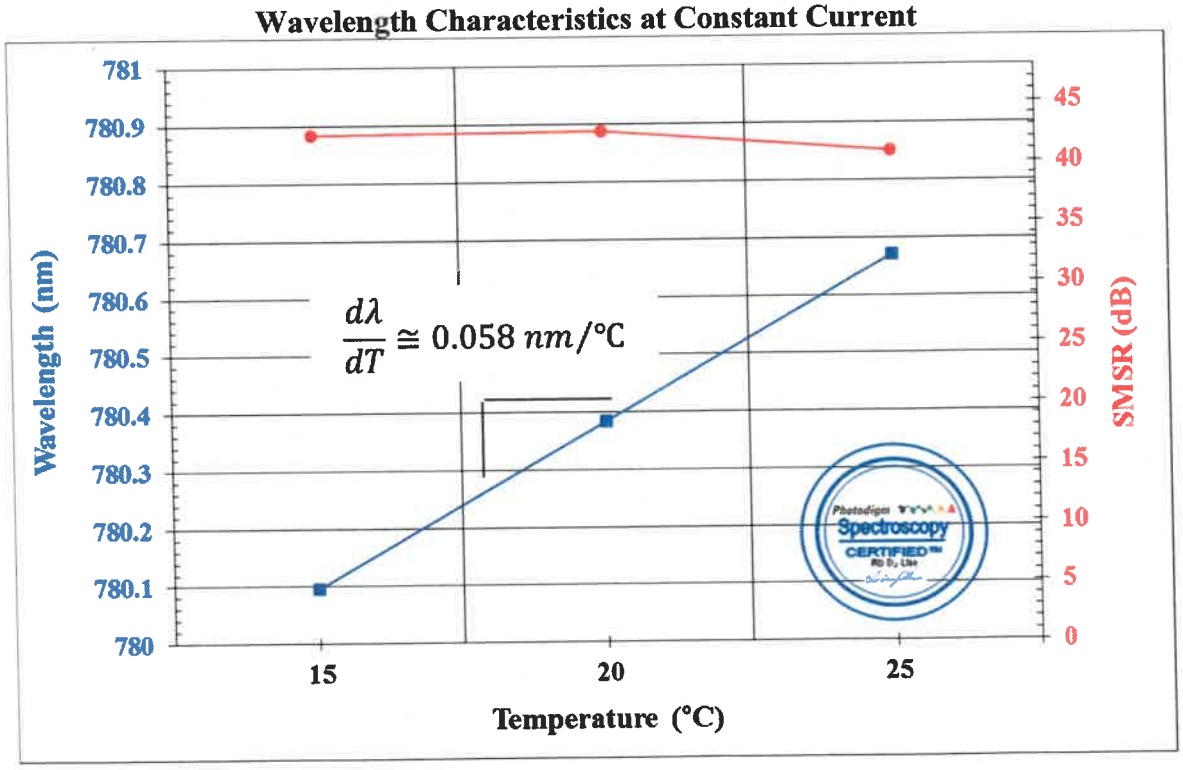
Mercury™ Packaged Laser Diode Data sheet
Laser ID #20-153, SN # SM28-13
LIV Characteristics under CW Operations

CAUTION: Do not exceed drive current/power of the LIV



Wavelength Characteristics at Constant Current

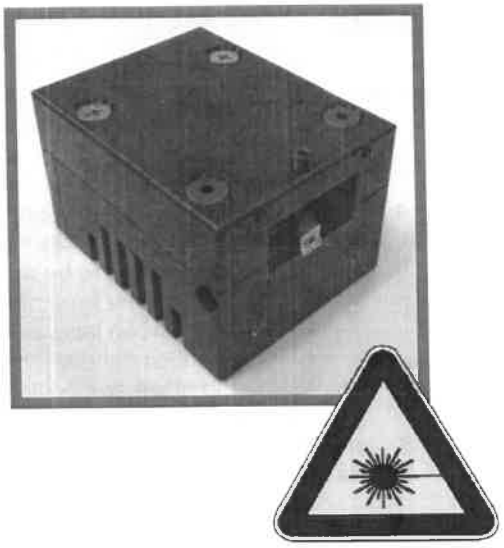


Wavelength and SMSR at I=90mA

Photodigm PRODUCT DATASHEET/USER GUIDE

TS-1000-A ver2
Mercury Laser Package Test Fixture

Data Sheet



Features

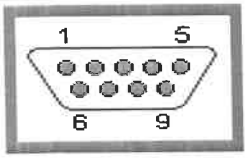
- 9-Pin D-Sub connector for Laser Bias and TEC control
- (4) ¼-20 mounting holes
- (4) 4-40 Mounting holes for 30mm cage system
- Compact Form
- ZIF Socket for FLEX cable
- Works with 2"-6" FLEX cable
- Heat sink capability for High-Powered lasers
- Black Anodized
- Dimensions: 2.55" x 2.0" x 1.6"

Description

The TS-1000-A, Mercury Laser Package Test Fixture, is designed to allow the user to easily mount and connect to the Mercury Laser package. It has an integrated 9-Pin D-Sub connector for both the Laser bias and the TEC control lines.
An adapter cable (part # TS-1000-A-Adapter) is provided which adapts to standard connector pin outs as used for ILX/Newport and similar Laser/TEC controllers.

9-Pin D-Sub Male Pin out

Pin Number	Description
1	LD+
2	LD-
3	NC
4	Thermistor (Bottom Side)
5	Thermistor (Top Side)
6	TEC-
7	TEC-
8	TEC+
9	TEC+



TS-1000- A ver2
Mercury Laser Package Test Fixture

User Guide

Installation:

1. Remove (2) Phillips screws from TOP Cover
2. Remove TOP Cover
3. Ensure Mechanical Latch on ZIF Socket is UNLOCKED
4. Ensure 8-32 Nylon Tipped Set Screw (used to hold DUT in place) is backed out sufficient for DUT to fit underneath it.
5. Thermal Grease needs to be applied to bottom of the slot where DUT is installed.
6. Install DUT through the front of the fixture FLEX Cable first.
   - The Silkscreen label on the FLEX cable is UP
   - Use caution to keep Thermal grease away from Face of DUT.
7. Set the DUT in place and Lock it down using the Set Screw. Excessive force is not required and may damage the DUT.
8. Install the FLEX Cable in the ZIF Socket and LOCK the Mechanical Latch.
9. Re-install the TOP Cover using the (2) Phillips screws.

NOTEs:

- The fixture is designed for the 2" FLEX Cable but may be used with the 6" Cable. If using the 6" cable carefully fold the cable back over itself after step 7. Use caution to not crimp the cable (min. 2mm bend radius). There is room available above the ZIF Socket in the TOP Cover.
- A piece of Capton (or similar) Tape on top of the DUT will help prevent marring by the Set Screw

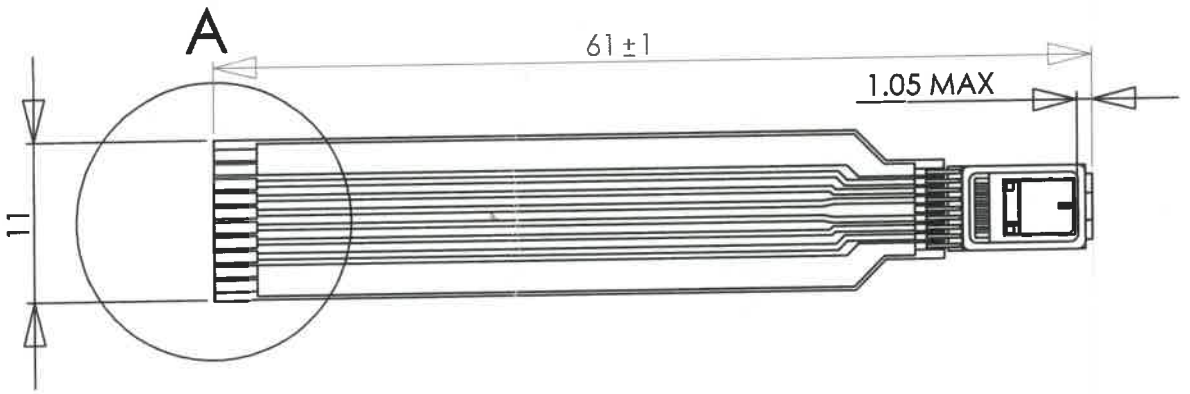
CAUTION:

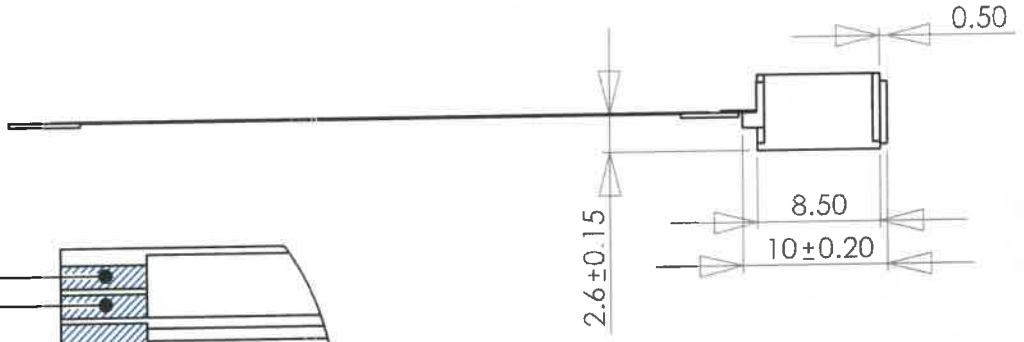
- **The TEC in the Mercury package is capable of Temperature change rates of 50°C/second.** Use caution when configuring control circuit.
- Use of Thermal Grease is required for proper heat sink operation. Ensure thorough coverage, but use sparingly.
- Follow proper ESD handling procedures when handling the DUT and FLEX Cable.
- Do not bend the Feed through Pins on the back of the DUT excessively (less than 5 degrees) while installing or removing from the fixture.

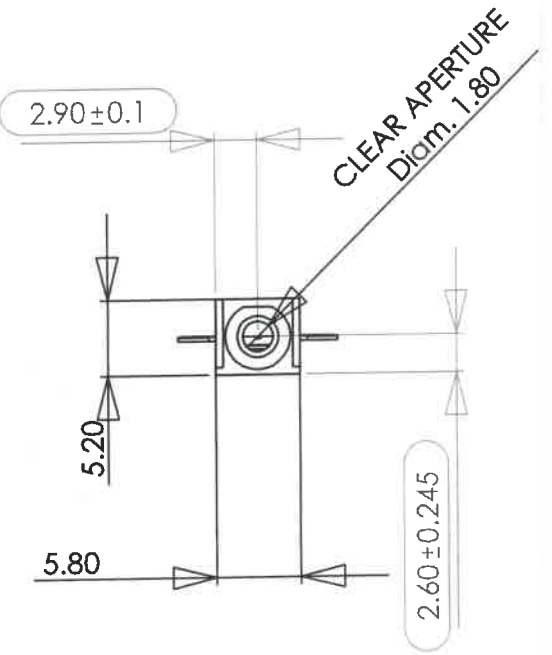
Removal:

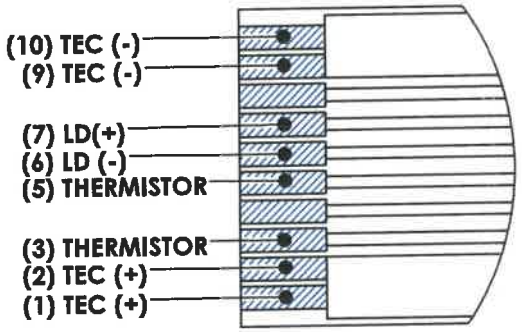
1. Reverse the installation procedure
2. Use caution to not contaminate the LENS of the DUT with Thermal Grease.

Revision	Change(s)
rev2B	Corrected Flex cable Pin-out
	in Detail A
rev2B	Add Pinout
rev2D-sht2	remove label decal from Lid
rev02e	Corrected sp.









DETAIL A
SCALE 4 : 1

DIMENSIONS ARE IN MM
TOLERANCES:
FRACTIONAL ±
ANGULAR: MACH ± BEND ±
TWO PLACE DECIMAL ±
THREE PLACE DECIMAL ±

	NAME	DATE
DRAWN	M. Eastin	032116
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

MATERIAL —

FINISH —

NEXT ASSY | USED ON

APPLICATION | DO NOT SCALE DRAWING

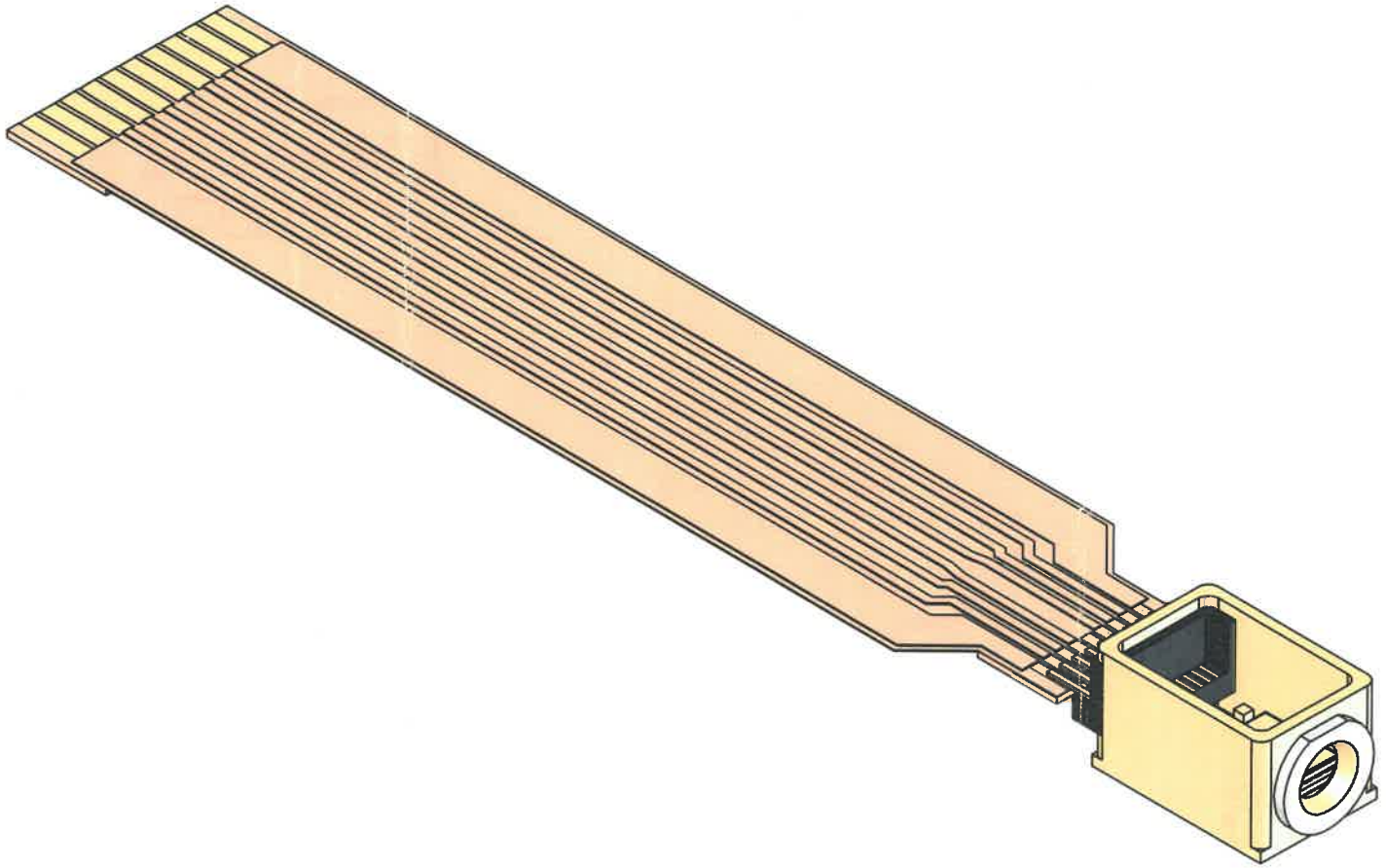
PHOTODIGM, INC.

Photodigm Single TOSA Assembly (MERC)

SIZE A | DWG. NO. FF-KYO-MERC-01 | REV. 02e

SHEET 1 OF 2

SCALE:2:1 | WEIGHT:



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN MM
TOLERANCES:
FRACTIONAL ±
ANGULAR: MACH ± BEND ±
TWO PLACE DECIMAL ±
THREE PLACE DECIMAL ±

INTERPRET GEOMETRIC TOLERANCING PER:

MATERIAL

FINISH

NEXT ASSY | USED ON

APPLICATION | DO NOT SCALE DRAWING

	NAME	DATE
DRAWN	M. Eastin	010516
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

PHOTODIGM, INC.

TITLE:

Photodigm Single TOSA Assembly (MERC)

SIZE A | DWG. NO. FF-KYO-MERC-01 | REV 02d

SCALE: 4:1 | WEIGHT: | SHEET 2 OF 2