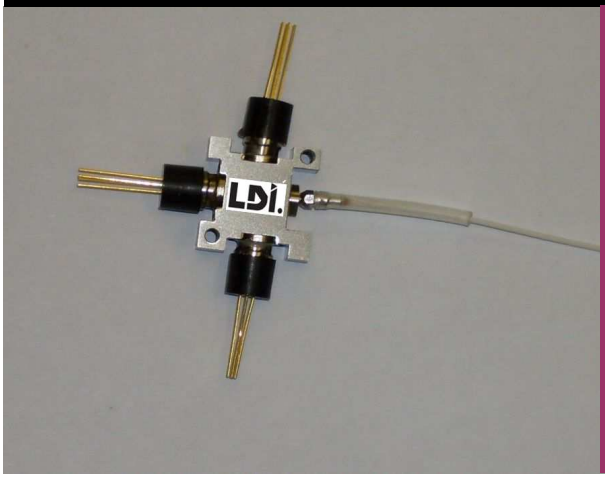
OSI LaserDiode, Inc.
An OSI Systems Company

TCW RGB TriBiner Visible Laser
TCW RGBM-105R



- Wavelengths: 450nm, 520nm, 638nm
- Compact Space Efficient Footprint
- Cost Saving Parts Count Reduction
- Several Fiber Pigtail Options Available
- Typical Applications:
  - RGB Displays
  - RGB Projectors
  - Optical Sensors
- RoHS Compliant

OSI Laser Diode, Inc's TCW TriBiner fiber coupled lasers are designed to meet efficient footprint requirements of the visible laser display market. The TCW RGBM-105R TriBiner is a Red, Green, Blue laser diode module efficiently coupling all three wavelengths into a single ouput fiber pigtail. Various fiber pigtail options are available.

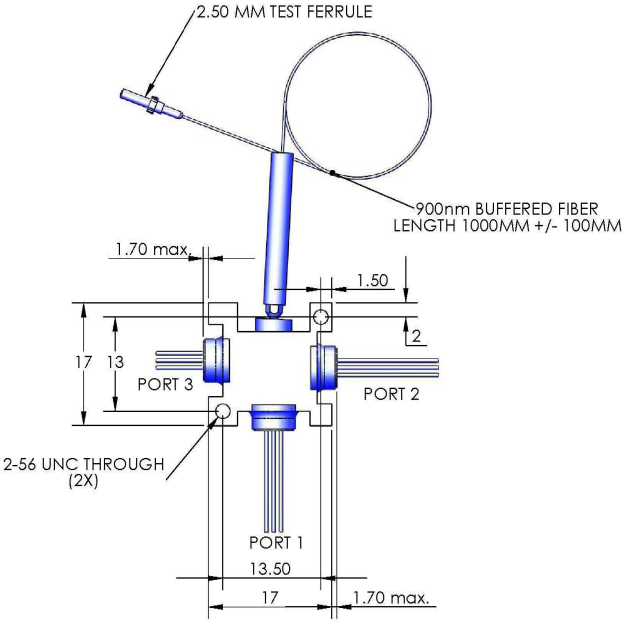
Characteristics @ T_a = 25° C Standard Model Specifications

TCW RGBM-105R

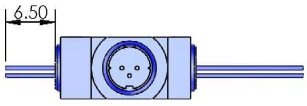
	Parameters	Symbol	Conditions @ 25° C	Typ.	Units
Port 1	Optical power (fiber)	P_o	125mA CW	35	mW
	Center wavelength	λ	125mA CW	638	nm
	Spectral width (FWHM)	$\Delta\lambda$	125mA CW	2	nm
	Threshold current	I_{th}	CW	50	mA
Port 2	Optical power (fiber)	P_o	100mA CW	35	mW
	Center wavelength	λ	100mA CW	450	nm
	Spectral width (FWHM)	$\Delta\lambda$	100mA CW	2	nm
	Threshold current	I_{th}	CW	30	mA
Port 3	Optical power (fiber)	P_o	200mA CW	35	mW
	Center wavelength	λ	200mA CW	520	nm
	Spectral width (FWHM)	$\Delta\lambda$	200mA CW	2	nm
	Threshold current	I_{th}	CW	40	mA
Common	Operating temp. range	T_{op}	@ rated drive conditions	-20 to 50	°C
	Storage temp. range	T_{stg}	Non operating	-40 to 85	°C
	Fiber Length	L	per mechanical outline	1	Meter
	Fiber Type	F_t	105 / 125 / 900 um MMF		um

Reliability data available upon request

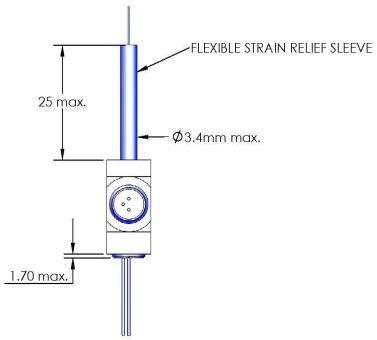
Combiner Package and Pin Out



TCW RGBM-105R PIN OUT TABLE				
Port	**Laser**	**Pin 1**	**Pin 2**	**Pin 3**
1	**638nm**	**Cathode**	**Case**	**Anode**
2	**450nm**	**Cathode**	**Case**	**Anode**
3	**520nm**	**Cathode**	**Case**	**Anode**



Bottom



Detailed package drawings are available upon request. Standard fiber length is 1 +/- 1 meter.

Part Ordering Information

Personal Hazard and Handling Precautions:
Handle optical fiber with normal care, avoiding stretch, tension, twist, kink or bend abuse**. ESD** precautions apply. Normal aversion reactions will protect from radiation hazards to the eye associated with devices of this kind.
Class 3B Laser.

Warranty:
Please refer to your product purchase agreement for complete details or check with your Laser Diode sales representative.

Notice:
Laser Diode Inc. reserves the right to make changes to the products or information contained herein without notice. No liability is assumed as a result of their use or application.