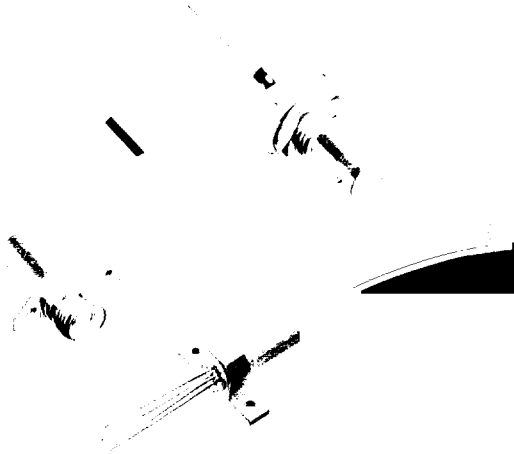


Receptacle and Coaxial 1550 nm Laser Diode

SCW 15 Series
Laser 1550 nm



- ▶ MQW Laser Structures
- ▶ High Power
- ▶ Low Back Reflection Coax Package
- ▶ Singlemode Fiber Coupling
- ▶ Laser Welded Construction
- ▶ Coaxial Fiber Pigtailed
- ▶ FC, SC, ST Receptacles

Description

The SCW 15 series is a new generation of coaxial fiber pigtailed and receptacle laser diodes utilizing high reliability multiple quantum well ridge waveguide structures with emission wavelength in the 1550 nm region.

This new range of high quality laser diodes couples a range of powers into a singlemode, 9/125µm fiber and offers characteristics such as low threshold current and an operating temperature range of -40°C to +85°C. Using proprietary techniques our coaxial devices are specifically designed for applications which require low back reflection.

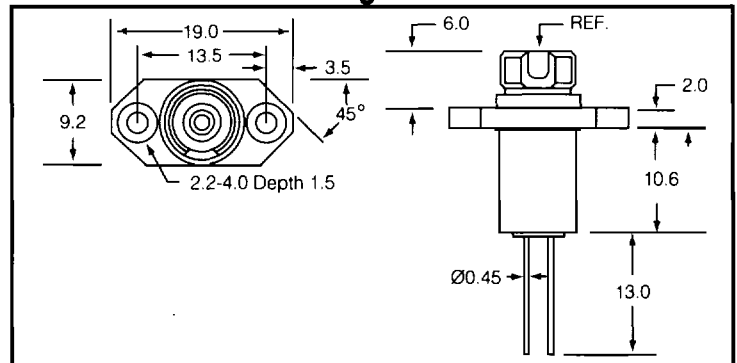
Long term product reliability is assured by our proprietary lensing technique, package laser welding, high temperature burn-in periods and temperature shock testing. These devices are built to withstand the rigorous testing regimes detailed by the Bellcore Technical Advisory document for optoelectronic components.

SCW 15 Series

Power Options μ W	Units	120-1000
Spectral Characteristics		
Wavelength - Range	nm	1520-1580
Wavelength shift	nm/ $^{\circ}$ C	0.45
Spectral width - RMS	nm	2
Spectral width - FWHM	nm	3
Drive Characteristics		
Typ. threshold current @ 25 $^{\circ}$ C	mA	25
Typ. threshold current @ 60 $^{\circ}$ C	mA	60
Max. current over temperature range	mA	110
Typ./max. forward voltage	V	1.2/1.7
Typ./max. optical rise/fall time	ns	0.3/0.5
Monitor Diode		
Min./typ./max. photocurrent at P _{max}	mA	0.1/0.3/1.0
Dark current	nA	15
Capacitance	pF	5
Reverse voltage	V	5
Tracking error (note 1)	dB	\pm 1 dB
Mechanical		
Minimum mating cycles		500
Repeatability	dB	\pm 0.5
Intermatability	dB	1.0
Laser Temperature Range		
Module operating temperature (note 2)	$^{\circ}$ C	-40 to +85
Storage temperature	$^{\circ}$ C	-40 to +85

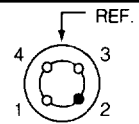
Package Styles

FC/PC Package SCW 1508

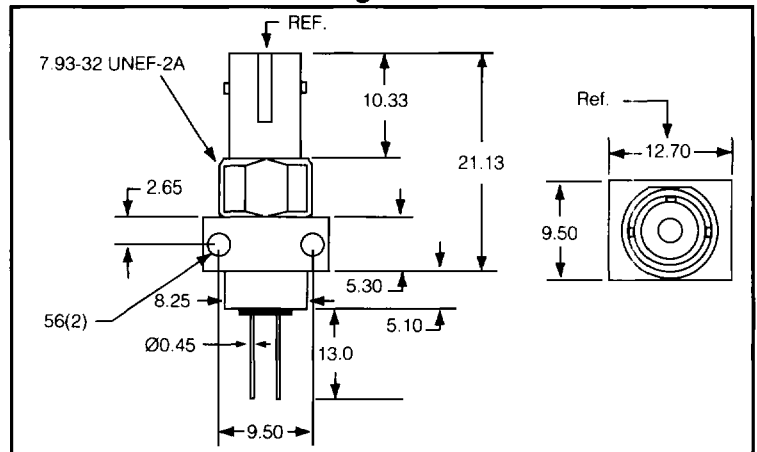


Pin Designation* (Rear View)

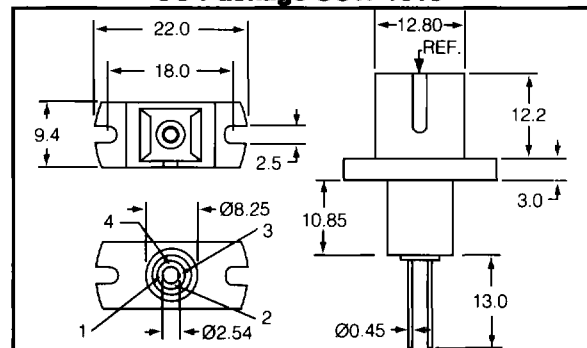
- | | |
|-------------------|-------------------|
| Type J | Type M |
| 1. PD Anode | 1. LD Cathode |
| 2. LD Anode, Case | 2. LD Anode, Case |
| 3. LD Cathode | 3. PD Anode |
| 4. PD Cathode | 4. PD Cathode |
- * Pincircle 2.54 mm Other pin-outs available



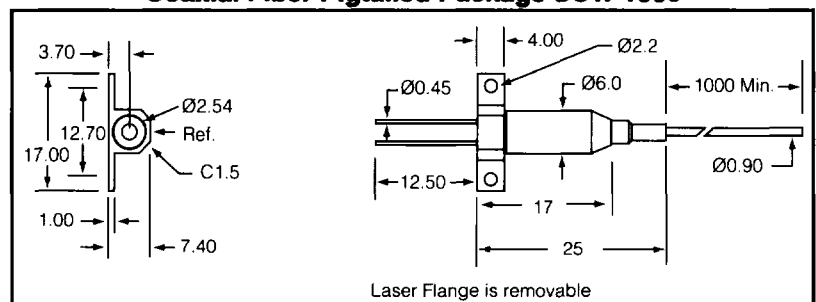
ST Package SCW 1528



SC Package SCW 1510



Coaxial Fiber Pigtailed Package SCW 1506



Receptacle and Coaxial Laser Diode

¹ Tracking error is the variation of the linear relationship between fiber coupled power and monitor diode current, over the specified operating temperature range.

² Available Q3 1995.

All parameters are specified at 25 $^{\circ}$ C and are typical unless otherwise stated.

Part Numbers

SCW 15 XXX-XXX

Package Style	Pinout	Power Option
06, 08, 10, 28	M, J	See Table
Power Options	Code	Power
	010	= 100 μ W
	025	= 250 μ W
	050	= 500 μ W
	100	= 1000 μ W
	200	= 2000 μ W (1506 only)

Part Number Example - SCW-1506M-050

LASER DIODE, INC., reserves the right to make changes at any time as deemed practical and/or necessary to improve the design and to supply the best possible product.

Information provided is believed at this time to be accurate and reliable. No responsibility is assumed for its use, nor for any infringements on the rights of others.

For further information on this or other products of Laser Diode, Inc., please call:



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