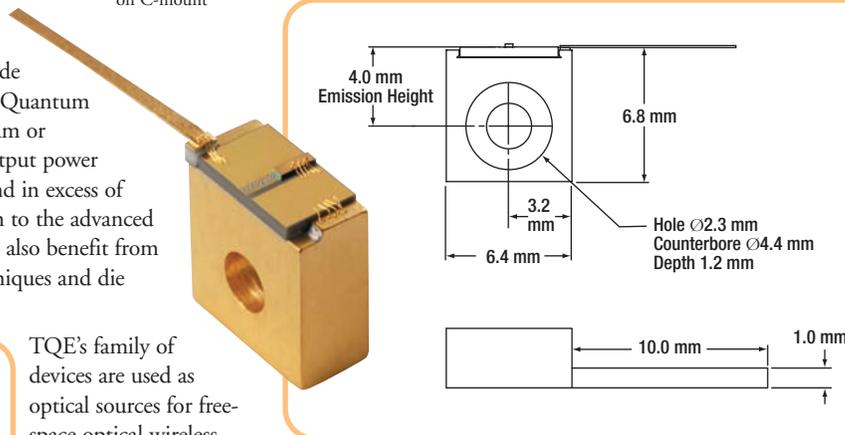


3 W Broad-Area Lasers

Thorlabs offers two IR Broad-Area Lasers. The Broad-Area Laser products from Thorlabs Quantum Electronics (TQE) are reliable Fabry-Perot (FP) laser diodes based on a high-power InP ridge waveguide device design, combined with a Multiple Quantum Well (MQW) chip optimized for 1.208 μm or 1.4 μm . Product features include high output power in excess of 1.8 W for the 1.4 μm chip and in excess of 2.5 W for the 1.208 μm chip. In addition to the advanced ridge waveguide technology, these devices also benefit from the advanced epitaxial wafer growth techniques and die bonding processes.

BAL112CM
Broad-Area Laser
on C-mount

NEW
products



Features

- 100 μm Strip Width
- High Power CW Operation
 - 3 W @ 1.208 μm
 - 2 W @ 1.4 μm
- Available as Chip on C-Mount

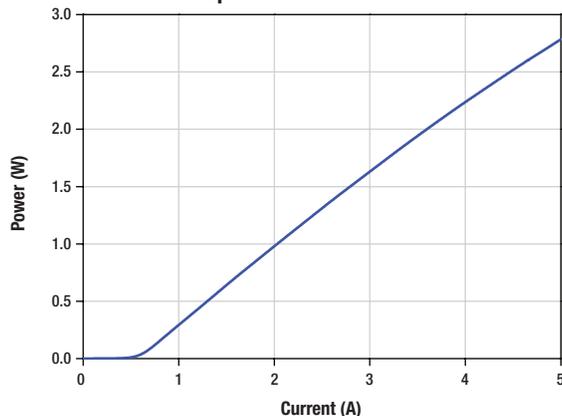
TQE's family of devices are used as optical sources for free-space optical wireless systems and as laser transmitters for eye-safe remote sensing applications. Additional packaging options such as fiber-pigtailed TO cans, butterfly packaging, chip on TO header, and chip-on-submount (CoS) are available upon request.

Mechanical
Drawings Available on the
WEB

Optical-Electrical Characteristics

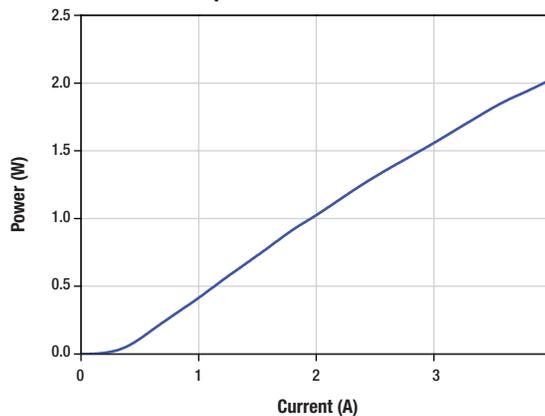
ITEM#	Parameter	Symbol	BAL112CM			BAL114CM		
			Min	Typical	Max	Min	Typical	Max
	Center Wavelength	λ_c	1.188 μm	1.208 μm	1.228 μm	1.38 μm	1.4 μm	1.42 μm
	Spectral Bandwidth (rms)	BW	–	1.5 nm	5 nm	–	3 nm	6 nm
	CW Output Power	P_{CW}	2.5 W	3 W	–	1.8 W	2 W	–
	Operating Current	I_{OP}	–	5 A	7 A	–	4 A	5 A
	Threshold Current	I_{TH}	–	0.6 A	0.75 A	–	0.33 A	0.4 A
	Slope Efficiency	–	0.5 W/A	0.6 W/A	–	0.48 W/A	0.55 W/A	–
	Operating Voltage	V_F	–	1.33 V	1.6 V	–	1.22 V	1.5 V
	EO Efficiency	–	35%	40%	–	35%	40%	–
	Vertical Farfield (FWHM)	θ_T	20 °	26 °	31 °	31 °	36 °	41 °
	Lateral Farfield (1/e ²)	θ_L	15 °	20 °	25 °	12 °	17 °	22 °

Optical Power vs Current



P/I Curve for BAL112CM

Optical Power vs Current



P/I Curve for BAL114CM

ITEM #	\$	£	€	RMB	DESCRIPTION
BAL112CM	\$ 650.00	£ 468.00	€ 565,50	¥ 5,180.50	1.208 μm , 3 W, Broad-Area Fabry-Perot Laser on C-Mount
BAL114CM	\$ 650.00	£ 468.00	€ 565,50	¥ 5,180.50	1.4 μm , 2 W, Broad-Area Fabry-Perot Laser on C-Mount