

Opto Speed

High Speed DFB-Laser 1550 nm

LCSH1550A-DFB

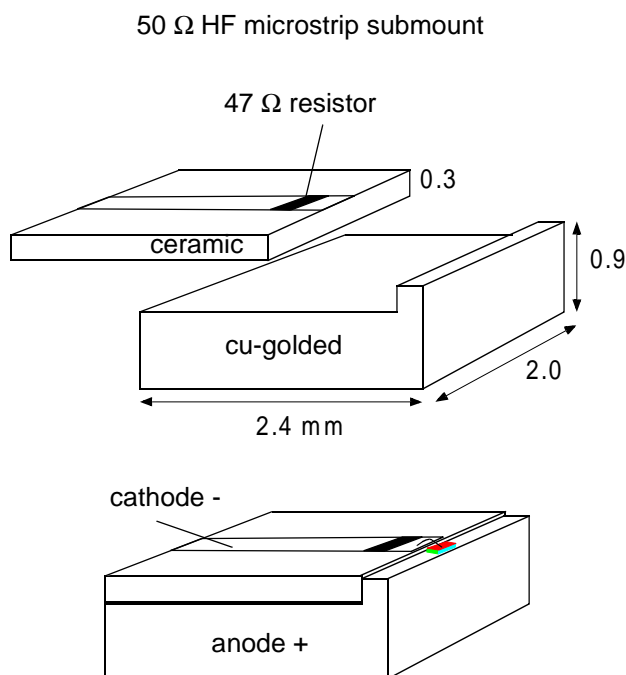
■ FEATURES

Low Threshold
High Power
High Speed
SQW Active Layer
50 Ω matched submount

■ PRODUCT DESCRIPTION

The LCSH1550A-DFB is a semiconductor DFB laser working at 1550 nm for applications up to 10 GB/s. The device can be delivered as bare die or as chip on submount. Best performance can be obtained by using the 50 Ω matched microstrip submount. Wavelength selection for chip on submount possible.

The superior high speed performance make this device very suitable for STM-64 / OC-192 applications.



■ SPECIFICATIONS @ $T_{\text{ambient}} = 20^{\circ}\text{C}$

Parameter	Conditions	LCSH1550A-DFB			UNIT
		Min	Typ	Max	
Supply current		0		50	mA
Threshold current			10		mA
Output power	I _{th} +40 mA		6		mW
3 dB modulation bandwidth	I _{th} +40 mA		12		GHz
Central wavelength		1540	1550	1560	nm
Wavelength shift			0.3		nm/ $^{\circ}\text{C}$
Ext. quantum efficiency			0.15		W/A
Vert. far field angle	FWHM		43		deg
Hor. far field angle	FWHM		34		deg
Relative noise intensity	I _{th} +40mA		-135		dB/Hz