Opto Speed

High Speed FP-Laser 1550 nm

LCSH1550A-FP

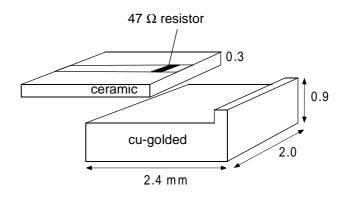
■ FEATURES

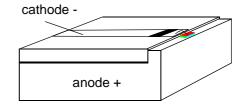
Low Threshold
High Power
High Speed
High Temperature
SQW Active Layer
50 Ω matched submount

■ PRODUCT DESCRIPTION

The LCSH1550A-FP is a semiconductor Fabry Perot laser working at 1550 nm for applications up 10 GB/s in short haul links or local networks. 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. The low threshold and the good high temperature behaviour make this device suitable for low cost high speed short distance application with no need of TEC.

 $50~\Omega$ HF microstrip submount





■ SPECIFICATIONS @ T_{ambient} = 20C

Parameter	Conditions	LCSH1550A-FP Min Typ Max	UNIT
Supply current		0 50	mA
Threshold current		8	mA
Threshold current	0 - 70 °C	4 30	mA
Output power	Ith+40 mA	8	mW
3 dB modulation bandwith	Ith+40 mA	10	GHz
Central wavelength		1540 1550 1560	nm
Ext. quantum efficiency		0.2	W/A
Vert. far field angle	FWHM	43	deg
Hor. far field angle	FWHM	34	deg
Relative noise intensity	Ith+40mA	-135	dB/Hz