

Opto Speed

High Temperature 10 Gb/s FP-Laser 1310 nm

LCSH1310A-FP

■ FEATURES

Low Threshold
High Power
High Speed
High Temperature
MQW Active Layer
50 Ω Matched Submount

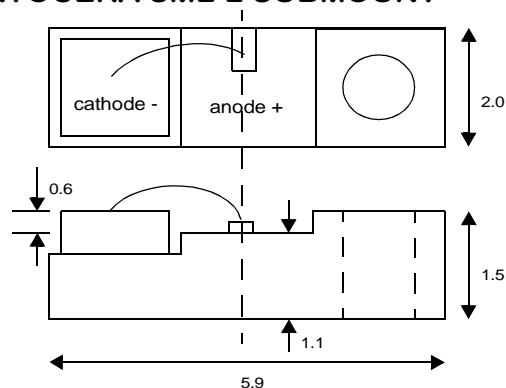
■ PRODUCT DESCRIPTION

The LCSH1310A-FP is a semiconductor Fabry Perot laser working at 1310 nm for applications up to 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, good high frequency and high temperature behaviour make this device suitable for low cost high speed short distance applications with no need of a TEC.

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

Parameter	Symbol	Unit	Min	Typ	Max	Conditions
Operating current	I_{op}	mA	0		50	
Threshold Current	I_{th}	mA	3	6	9	
					25	0-80 $^{\circ}\text{C}$
Output Power	P_{out}	mW	4	6	8	$I_{op}=50\text{ mA}$
Wavelength	λ_c	nm	1290	1310	1340	
Modulation bandwidth (-3 dB)	B	GHz	10	12	14	$I_{op}=50\text{ mA}$
Differential external quantum efficiency	η	W/A	0.1	0.15	0.2	
Vertical farfield angle (FWHM)		degree	20	26	30	
Horizontal farfield angle (FWHM)		degree	20	24	28	

■ KYOCERA SML-2 SUBMOUNT



■ 50 Ω HF MICROSTRIP SUBMOUNT

