FCI-InGaAs-XXX-LCER

High Speed InGaAs Photodiodes Mounted on Ceramic Packages w/Leads

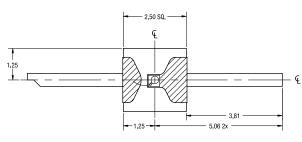
FCI-InGaAs-XXX-LCER with active area sizes of 75µm, 120µm, 300µm, 400µm and 500µm are part of OSI Optoelectronics's high speed IR sensitive photodiodes mounted on gull wing ceramic substrates. The chips can be epoxy/eutectic mounted onto the ceramic substrate.

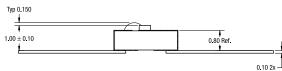
APPLICATIONS

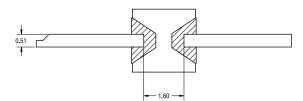
- High Speed Optical Communications
- Gigabit Ethernet/Fibre Channel
- SONET / SDH, ATM
- Diode Laser Monitoring
- Instrumentation

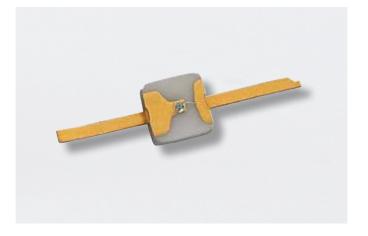
FEATURES

- Low Noise
- High Responsivity
- High Speed
- Spectral Range
 900nm to 1700nm











Notes:

• All units in millimeters.

All devices are mounted with low out gassing

conductive epoxy with tolerance of $\pm 25 \mu m$. Eutectic mounting is also available upon request.

Absolute Maximum Ratings										
PARAMETERS	SYMBOL	MIN	МАХ	UNITS						
Storage Temperature	T _{stg}	-40	+85	°C						
Operating Temperature	T _{op}	0	+70	°C						
Soldering Temperature	T _{sld}		+260	°C						

Electro-Optical Characteristics T _A =														$T_A = 2$	23°C			
PARAMETERS	SYMBOL	CONDITIONS	FCI-InGaAs-75LCER		FCI-InGaAs-120LCER		FCI-InGaAs-300LCER		FCI-InGaAs-400LCER			FCI-InGaAs-500LCER			UNITS			
			MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	UNITS
Active Area Diameter	AA _¢			75			120			300			400			500		μm
Responsivity	R _λ	λ=1310nm	0.80	0.90		0.80	0.90		0.80	0.90		0.80	0.90		0.80	0.90		A/W
		λ=1550nm	0.90	0.95		0.90	0.95		0.90	0.95		0.90	0.95		0.90	0.95		
Capacitance	Cj	V _R = 5.0V		0.65			1.0			10.0			14.0			20.0		pF
Dark Current	I _d	V _R = 5.0V		0.03	2		0.05	2		0.30	5		0.40	5		0.50	20	nA
Rise Time/ Fall Time	t _r /t _f	$V_{R} = 5.0V,$ $R_{L} = 50\Omega$ 10% to 90%			0.20			0.30			1.5			3.0			10.0	ns
Max. Reverse Voltage					20			20			15			15			15	v
Max. Reverse Current					1			2			2			2			2	mA
Max. Forward Current					5			5			8			8			8	mA
NEP				3.44E- 15			4.50E- 15			6.28E- 15			7.69E- 15			8.42E- 15		W/√Hz