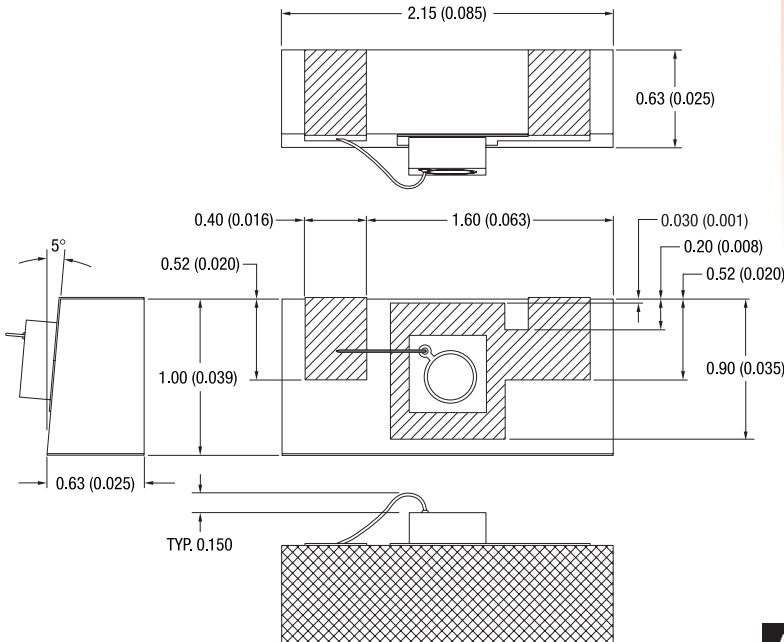
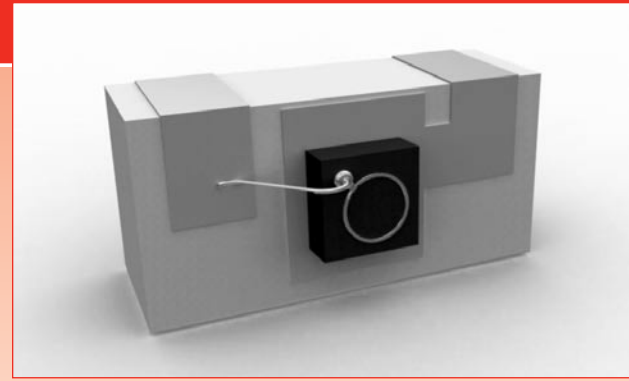


FCI-InGaAs-XXX-ACER

High Speed InGaAs Photodiodes Mounted on Wedge Ceramic Packages

FCI-InGaAs-XXX-ACER with active area sizes of 70µm, 120µm, 300µm, 400µm and 500µm is part of OSI Optoelectronics's high speed IR sensitive photodiodes mounted on angled ceramic substrates. The ceramic substrate with an angled surface by 5° greatly reduces the back reflection. The chips can be epoxy/eutectic mounted onto the angled ceramic substrate.



Notes:

- All units in millimeters (inches).
- All devices are eutectic mounted with tolerance of ±50µm.

• APPLICATIONS

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

• FEATURES

- 5° Angle Ceramic
- Low Noise
- High Responsivity
- High Speed
- Spectral Range 900nm to 1700nm

Absolute Maximum Ratings

PARAMETERS	SYMBOL	MIN	MAX	UNITS
Storage Temperature	T _{stg}	-40	+85	°C
Operating Temperature	T _{op}	0	+70	°C
Soldering Temperature	T _{slid}	---	+260	°C

Electro-Optical Characteristics

T_A = 23°C

PARAMETERS	SYMBOL	CONDITIONS	FCI-InGaAs-70ACER			FCI-InGaAs-120ACER			FCI-InGaAs-300ACER			FCI-InGaAs-400ACER			FCI-InGaAs-500ACER			UNITS
			MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	
Active Area Diameter	AA _φ	---	---	70	---	---	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	---	A/W
Capacitance	C _j	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 = 50Ω 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