■FCI-InGaAs-300B1XX

Back Illuminated InGaAs Photodiode / Arrays

FCI-InGaAs-300B1XX series are multifunctional backside illuminated photodiode/arrays. They come standard in a single element diode or 4- or 8- elements array with active area of 300um. These back illuminated InGaAs photodiode/arrays are designed to be flip chip mounted to an optical plane for front or back illumination. They can be traditionally mounted (active area facing up), or assembled face down minimizing the overall dimensions. These low inductance, low dark current, and low capacitance back illuminated photodiode/arrays come with or without ceramic substrates.



APPLICATIONS

- High Speed Optical Communications
- Multichannel Fiber Optic Receiver
- Power Monitoring
- Single/Multi-Mode Fiber Optic Receiver
- Fast Ethernet, SONET/SDH OC-3/STM-1, ATM
- Instrumentation and Analog Receivers

• FEATURES

- Back Illumination
- High Responsivity on Both Front and Back
- Low Noise
- Spectral Range 900nm to 1700nm

| Electro-Optical Characteristics | | | T _A =23°C, V _R =5V |
|---------------------------------|--|--------------------|--|
| PARAMETERS | FCI-InGaAs-300B1 | FCI-InGaAs-300B1X4 | FCI-InGaAs-300B1X8 |
| Active Area Diameter | 300μm | 300μm, Pitch:500μm | 300μm, Pitch:500μm |
| Responsivity | Min. 0.85A/W @ 1550nm for both front and back Min. 0.80A/W @ 1310nm for both front and back | | |
| Capacitance | Typ. 8pF, Max. 10pF @ V_R =-5V | | |
| Dark Current | Typ. 0.05nA, Max. 5.0nA @ V_R =-5V | | |
| Max. Reverse Voltage | 15V | | |
| Max. Reverse Current | 5mA | | |
| Max. Forward Current | 25mA | | |
| Bandwidth | Min. 100MHz | | |
| Breakdown Voltage | Min. 10V @ 1uA | | |
| Storage Temperature Range | From -40 to 85°C | | |
| Operating Temperature Range | From 0 to 70°C | | |





