



LAPD-1-06-17-CHIP



TECHNICAL DATA

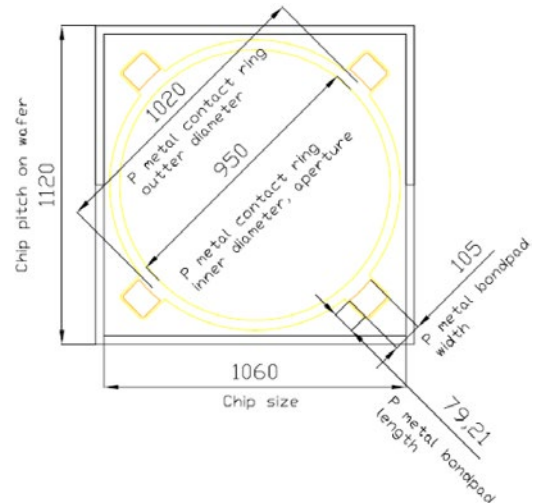
| | |
|----------------------------|---------------|
| Photodiode Chip die | InGaAs |
|----------------------------|---------------|

LAPD-1-06-17-CHIP adopt InGaAs pin structure based on InP by MOCVD method and planar diffusing technology. The active area is Ø 1 mm respectively.



Absolute Maximum Ratings

| Item | Symbol | Value | Unit |
|-----------------------|-----------|-------------|------|
| Reverse Voltage | U_R | 20 | V |
| Reverse Current | I_R | 20 | mA |
| Forward current | I_F | 10 | mA |
| Operating Temperature | T_{opr} | -20 ... +85 | °C |
| Storage Temperature | T_{std} | -40 ... +85 | °C |



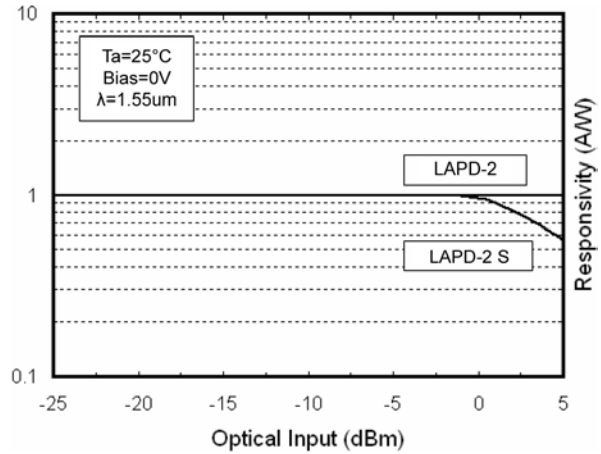
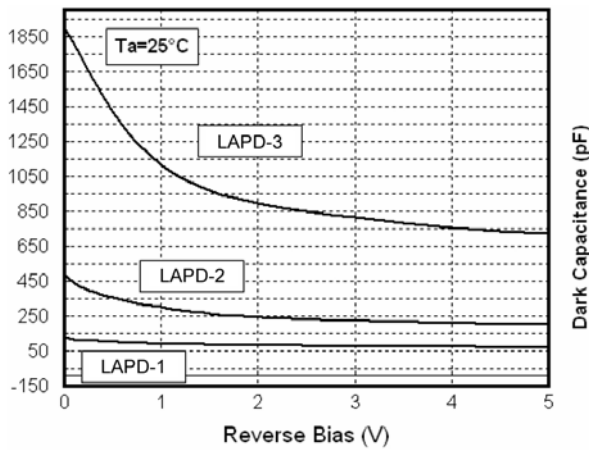
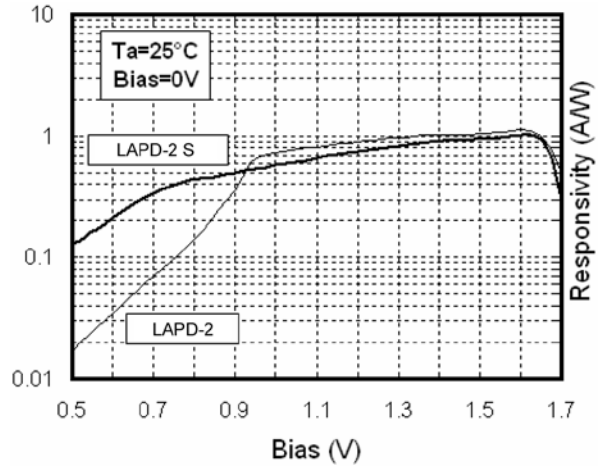
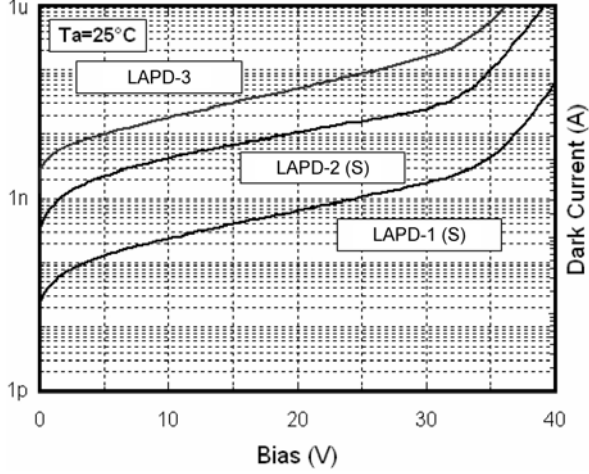
Specifications

| Item | Min. | Typ. | Max. | Unit | |
|--------------------------------|-------------|------|------|------|-----------------|
| Wavelength Range | 0.6 .. 1.7 | | | µm | |
| Active Area | Ø 1 | | | mm | |
| Saturation Power | 1550 nm | - | -8 | - | dBm |
| Specific Detectivity (D^*) | 1550 nm | 2.5 | 5 | - | 10^{12} Jones |
| Responsibility (0 V) | 650 nm | 0.20 | 0.30 | - | A/W |
| | 850 nm | 0.40 | 0.50 | - | |
| | 1310 nm | 0.80 | 0.90 | - | |
| | 1550 nm | 0.85 | 0.95 | - | |
| Capacitance | 0 V | - | 140 | 200 | pF |
| | -5 V | - | 70 | 100 | |
| Dark Current | -5 V | - | 2 | 10 | nA |
| Shunt Resistance | | 25 | 80 | - | MΩ |
| Chip Size | 1060 x 1060 | | | µm | |
| Chip Thickness | 300 | | | µm | |

Packing: Chips on adhesive film



Typical Performance Curves



LAPD-2 Spatial Response
 Ta=25°C, Bias=0V, $\lambda=1550\text{nm}$

