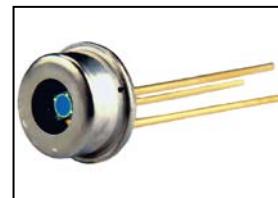




LAPD-1-09-17-TO46

TECHNICAL DATA



InGaAs Large Area Photo-Detector

Features

- Ø1 mm Active Aperture
- TO-46 package
- High Responsivity (0.9 – 1.7 µm)
- High Reliable Planar Device
- Low Leakage Current
- High Shunt Resistance
- Wide Dynamic Range

Applications

- Power Monitoring
- Covert IR Sensing
- Light Detection and Ranging (LIDAR)
- Remote Temperature Sensors
- Spectral Analysis
- Humidity Detection
- Gas Leak Detection
- Optical Powering

Absolute Maximum Ratings

Item	Value		Unit
	Min.	Max.	
Forward Current	-	20	mA
Reverse Current	-	10	mA
Reverse Voltage	-	-20	V
Operation Temperature Range	-20	+85	°C
Storage Temperature Range	-40	+85	°C

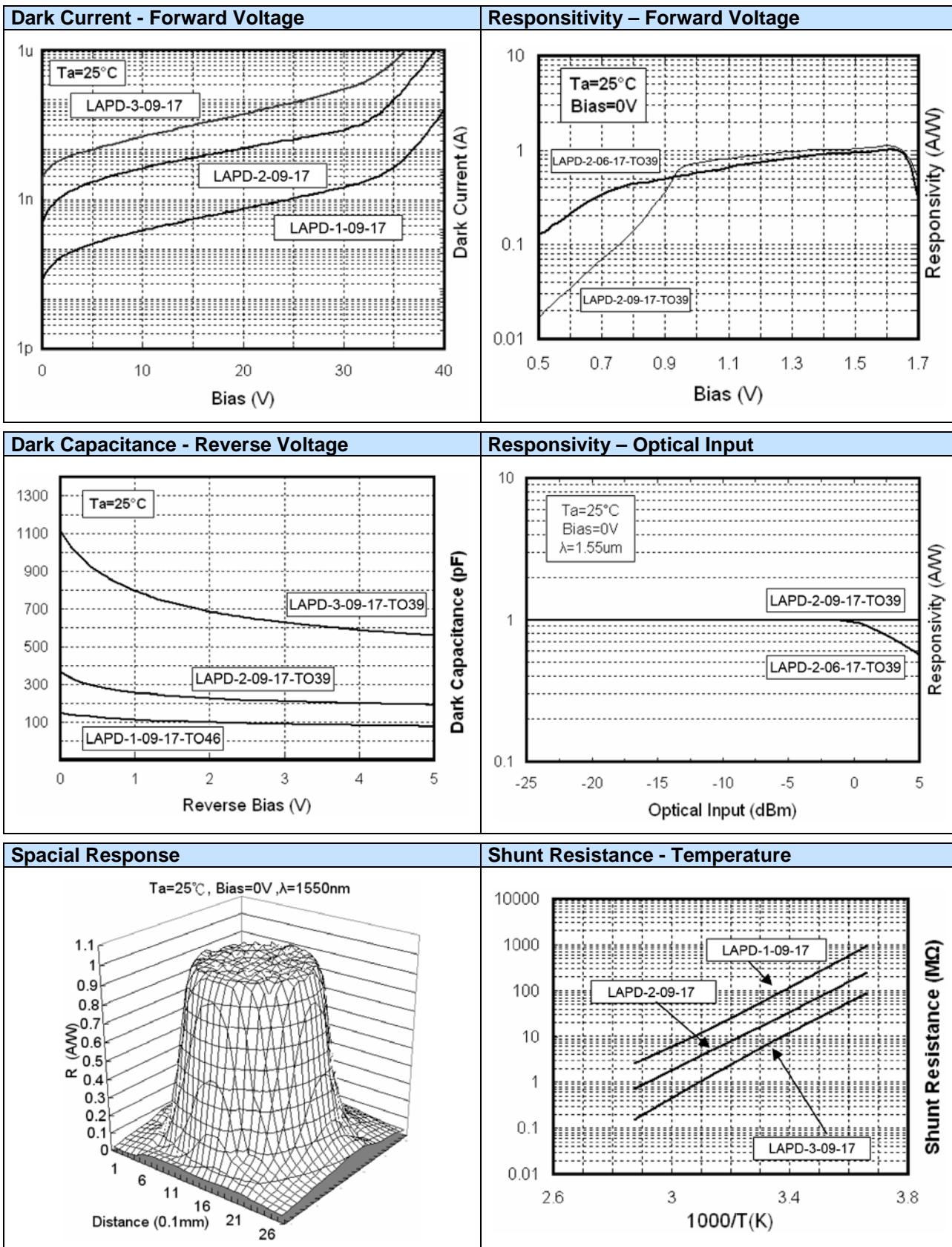
Specifications (25°C)

Item	Value			Unit
	Min.	Typ.	Max.	
Wavelength Range	0.9 - 1.7			µm
Active Aperture	Ø1			mm
Responsivity (0 V)	650 nm	0.02	0.05	A/W
	850 nm	0.10	0.20	
	1310 nm	0.80	0.90	
	1550 nm	0.85	0.95	
Shunt Resistance	25	80	-	MΩ
Capacitance	0 V	-	80	pF
	-5 V	-	40	
Dark Current (-5 V)	-	2	10	nA
Saturation Power (1550 nm, 0 V)	-	-3	-	dBm
D* (1550 nm)	2.5	5	-	10 ¹² Jones





Typical Performance Curves





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Package Dimensions

TO-46 package Unit: mm

Top View: Dimensions shown are Ø4.70, Ø2.00, Ø5.38, and Ø2.50.

Side View: Dimensions shown are 0.46, 1.90, 2.72, and 12.50 MIN. The "Detector Plane" is indicated as a horizontal line with four rectangular extensions representing detector elements.

Bottom View: Dimensions shown are Ø1.17, Ø0.45, and Ø2.54. The "Anode P1" is at the top, "Cathode P3" is at the bottom, "P2" is in the middle, and "NC" is at the bottom center.