

MXP1020 - PS/Q
MXP1022 - PS/Q
MXP1023 - PS/Q
MXP1001 - PS/D
MXP1004 - PS/D

Position Sensing Photo Detectors

Features

- Low Cross Talk
- Excellent Stability
- Low Noise
- Ultra High Positioning Accuracy

Applications

- Machine Tool Alignment
- Angle Measurement
- Targeting
- Remote Optical Alignment
- Guidance Systems

Electrical Characteristics @ 25°C

MODEL

/Q - Quad
 /D - Dual

| | EACH ACTIVE AREA | | GAP Inch | R 850nm A / W | UNIFORM. OF R 1mm dia. SPOT +/- % | R _{SH} +/-10 mV MOhms | ID nA | | V _B 10µA V min | C _J 1kHz pF | | | NEP 10V / 850nm W/(Hz) ^{1/2} | T _R 850nm / 50Ohm Load ns | |
|---------------------|------------------|-------------|-------------|---------------------|---|--------------------------------------|----------|------|------------------------------------|------------------------------|-------|-------|--|---|-------|
| | mm ² | Dim. Inch | | | | | -10V | -25V | | 0 V | -10 V | -25 V | | -10 V | -25 V |
| MXP1020-PS/Q | 7.11 | .105 x .105 | 0.005 | 0.5 | 2 | 50 | 20 | 50 | 50 | 120 | 15 | 10 | 5 X 10 ⁻¹³ | 15 | 10 |
| MXP1022-PS/Q | 0.26 | .020 x .020 | 0.0005 | 0.5 | 2 | 1,000 | 2 | 5 | 50 | 10 | 3 | 2 | 5 X 10 ⁻¹⁴ | 15 | 10 |
| MXP1023-PS/Q | 1.61 | .050 x .050 | 0.005 | 0.5 | 2 | 500 | 5 | 10 | 50 | 30 | 5 | 2 | 8 X 10 ⁻¹⁴ | 15 | 10 |
| MXP1001-PS/D | 3.22 | .100 x .050 | 0.005 | 0.5 | 2 | 100 | 10 | 20 | 50 | 60 | 10 | 5 | 2 X 10 ⁻¹³ | 15 | 10 |
| MXP1004-PS/D | 0.70 | .047 x .023 | 0.0008 | 0.5 | 2 | 500 | 5 | 10 | 50 | 15 | 10 | 5 | 8 X 10 ⁻¹³ | 15 | 10 |