

# QSD-2130

# SILICON PIN PHOTODIODE

## COMMON ANODE TYPE PIN PHOTO DIODE

### HIGH SPEED SENSITIVITY

### APPLICATION FOR VCSEL

- **DIE SIZE** 1.30mm × 1.30mm
- **DIE THICKNESS** 400 ± 15μm
- **METALLIZATION**
  - TOP Al
  - BOTTOM Au
- **PASSIVATION** Silicon Nitride
- **BONDING PAD SIZE**
  - CATHODE (TOP) 150μm × 150μm
  - ANODE (BOTTOM)



### ABSOLUTE MAXIMUM RATINGS ( Ta= 25° C )

Parameter	Symbol	Maximum rating	Unit
Reverse Breakdown Voltage	B <sub>VR</sub>	-35	V
Junction Temperature	T <sub>J</sub>	150	°C

### ELECTRICAL / OPTICAL CHARACTERISTICS ( Ta= 25° C )

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Open Circuit Voltage	V <sub>OP</sub>	Note(1)	-0.3	-0.32		V
Short Circuit Current	I <sub>SC</sub>	Note(1)	-13	-10		μA
Spectrum Sensitivity	λ		430 ~ 1,090			nm
Peak Sensing Wavelength	λ <sub>P</sub>			880		nm
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =100 mA		-1.3	-1.5	V
Dark Current	I <sub>D</sub>	V <sub>R</sub> =10V		-5	-10	nA
Reverse Breakdown Voltage	B <sub>VR</sub>	I <sub>R</sub> =10μA	-50	-80		V

Note(1): Parallel light of 1,000 Lux illumination is applied by a Tungsten lamp of 2856k.