

# QSD-1300A

# SILICON PHOTODIODE

**COMMON CATHODE TYPE PHOTO DIODE.**  
**HIGH EFFICIENCY SENSITIVITY.**

- **DIE SIZE** 3.00m × 3.00mm
- **DIE THICKNESS** 400 ± 15µm
- **METALLIZATION**
  - TOP Al
  - BOTTOM Au
- **BONDING PAD SIZE**
  - ANODE(TOP) 160µm × 160µm
  - CATHODE(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	0.4		V
Short Circuit Current	I <sub>SC</sub>	Note(1)	70	87		µA
Junction Capacitance	C <sub>J</sub>	V=3V, f=1MHz		30	50	PF
Spectrum Sensitivity	λ		450 ~ 1,100			nm
Peak Sensing Wavelength	λ <sub>P</sub>			940		nm
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =100 mA			1.5	V
Dark Current	I <sub>D</sub>	V <sub>R</sub> =10V			10	nA
Reverse Breakdown Voltage	B <sub>VR</sub>	I <sub>R</sub> =10µA	50	70		V

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



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