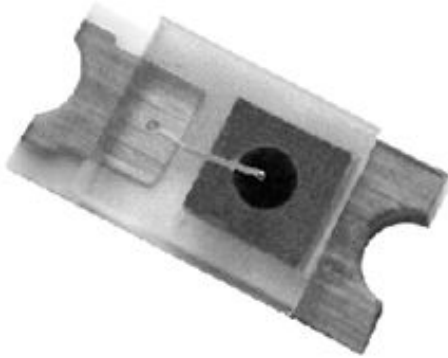


CERLED®

SMD Chip Detector

Selective Photodiode
SR 10 SPD 470 - 0.9 -H*

*RoHS-Compliant



Description

Wavelength range: bluish-green;

GaP technology.

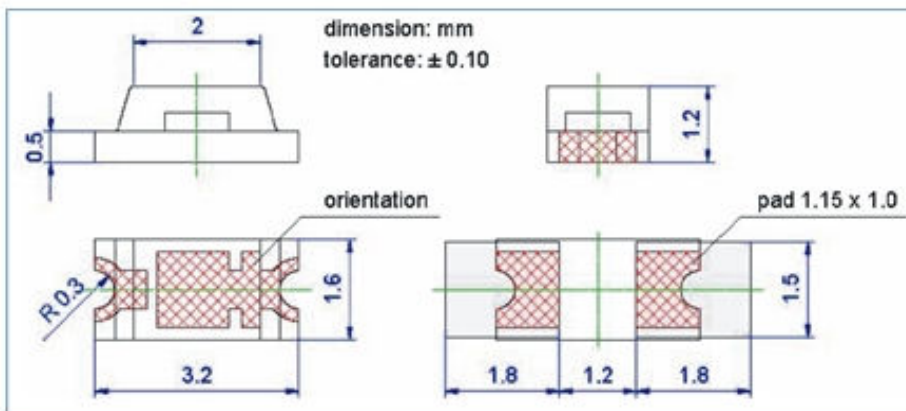
Ideal for sensor applications, alarm systems,
light barriers, special sensors for automotive
industry.

Available in 8 mm blister tape.

Chip size: 0.86 x 0.86 mm.

Features and Benefits

- ▶ Narrow bandwidth and high spectral sensitivity in the bluish-green visible range (380...556 nm)
- ▶ Low cost chip based on GaP
- ▶ Chip on PCB, surface mounting device
- ▶ End - to - end and side - to - side stackable down to a pitch of 1.6 mm



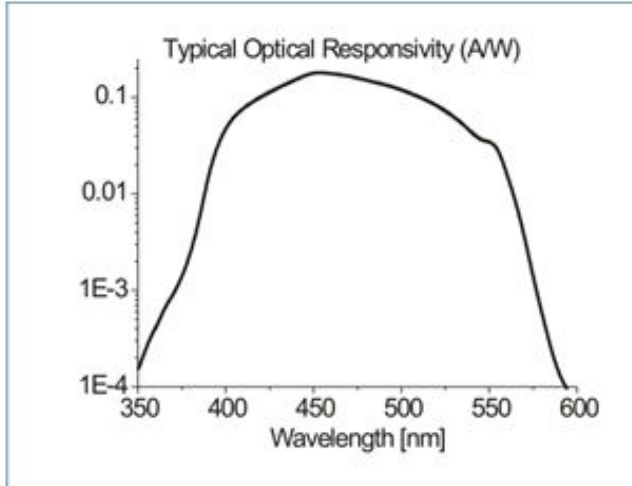
Maximum Ratings at 25° C

Storage temperature	T _{st}	-25° C to 120° C
Operating temperature	T _{op}	-25° C to 80° C
Soldering temperature	T _{solid} (5 s)	240° C

Characteristics at 25° C

	Symbol	Value	Unit
Active area	A	0.7	mm ²
Peak sensitivity wavelength	λ _p	470	nm
Spectral range at 0.5 max.	λ _{min} - λ _{max}	425 ... 525	nm
Spectral range at 0.1 max.	λ _{min} - λ _{max}	380 ... 556	nm
Typical responsivity at λ _p	S _λ	0.18	A/W
Spectral bandwidth at 50 %	Δλ _{0.5}	100	nm
Maximal dark current at V _R = 5 V	I _D	30	pA
Maximal reverse voltage at I _R = 100 μA	V _R	10	V
Temperature coefficient of I _D	TCI _D	5	times/K
Operating and storage temperature range	T _{amb} / T _{stg}	-25 to +100	°C

Figure 1



Orientation of taped parts: anode to perforation

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