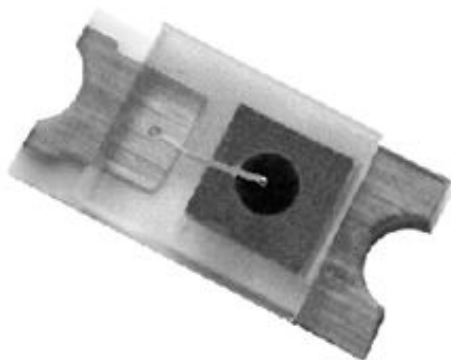


# CERLED® SMD Chip Detector

Selective Photodiode  
SR 10 SPD 525 - 0.9 -H\*

\*RoHS-Compliant



## Description

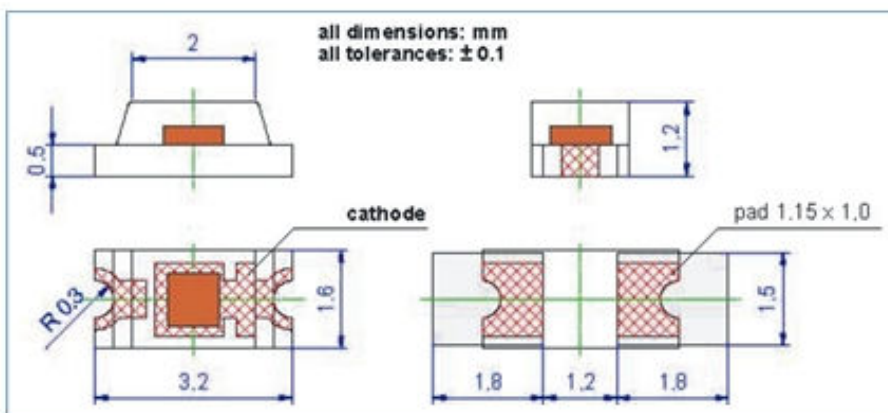
Wavelength range: green;  
GaP technology.

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

Available in 8 mm blister tape.

## Features and Benefits

- ▶ Narrow bandwidth and high spectral sensitivity in the green-red visible range (450...570 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



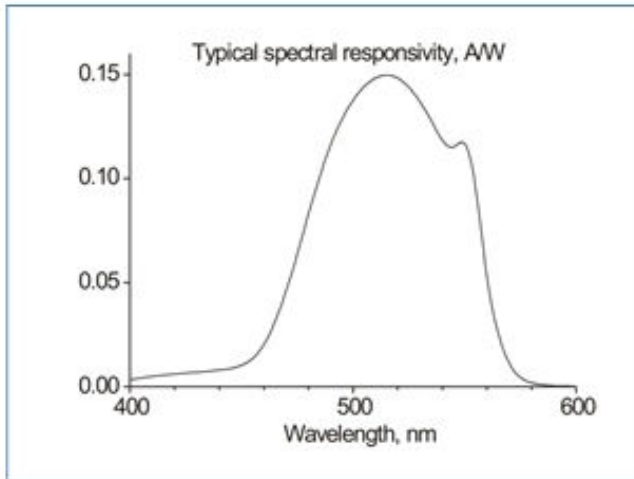
### Maximum Ratings at 25° C

Storage temperature	T <sub>st</sub>	-25° C to 120° C
Operating temperature	T <sub>op</sub>	-25° C to 80° C
Soldering temperature	T <sub>sold</sub> (5 s)	240° C

### Characteristics at 25° C

	Symbol	Min.	Typ.	Max.	Unit	Conditions
Active area	A		0.73		mm <sup>2</sup>	
Peak sensitivity wavelength	$\lambda_p$	510	525	535	nm	V <sub>R</sub> = 0 V
Spectral range at 0.5 max.	$\lambda_{0.5}$	480		560	nm	V <sub>R</sub> = 0 V
Responsivity at $\lambda_p$	S <sub><math>\lambda</math></sub>	0.15	0.25	0.38	A/W	V <sub>R</sub> = 0 V
Spectral bandwidth at 50 %	$\Delta\lambda_{0.5}$		75		nm	V <sub>R</sub> = 0 V
Dark current	I <sub>D</sub>		5	30	pA	V <sub>R</sub> = 1 V, E <sub>e</sub> = 0
Reverse voltage	V <sub>R</sub>	5			V	I <sub>R</sub> = 10 $\mu$ A
Temperature coefficient of I <sub>D</sub>	TCI <sub>D</sub>		4.7		%K	

Figure 1



Orientation of taped parts: anode to perforation

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