

LT4540

Dual-element Silicon Photodiode

DATA SHEET

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Approved By:

Checked By:

Prepared By:

LT4540 is a dual-element Si photodiode which is moulded into a small plastic leadless optical package. Produced as one chip, the photodiodes offer a very good symmetry, low dark current and high sensitivity.

FEATURES

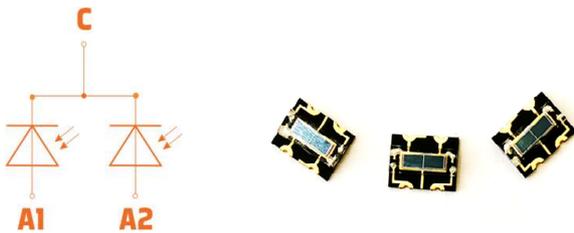
- Low dark current
- High sensitivity
- Small surface mounting type

TYPICAL APPLICATIONS

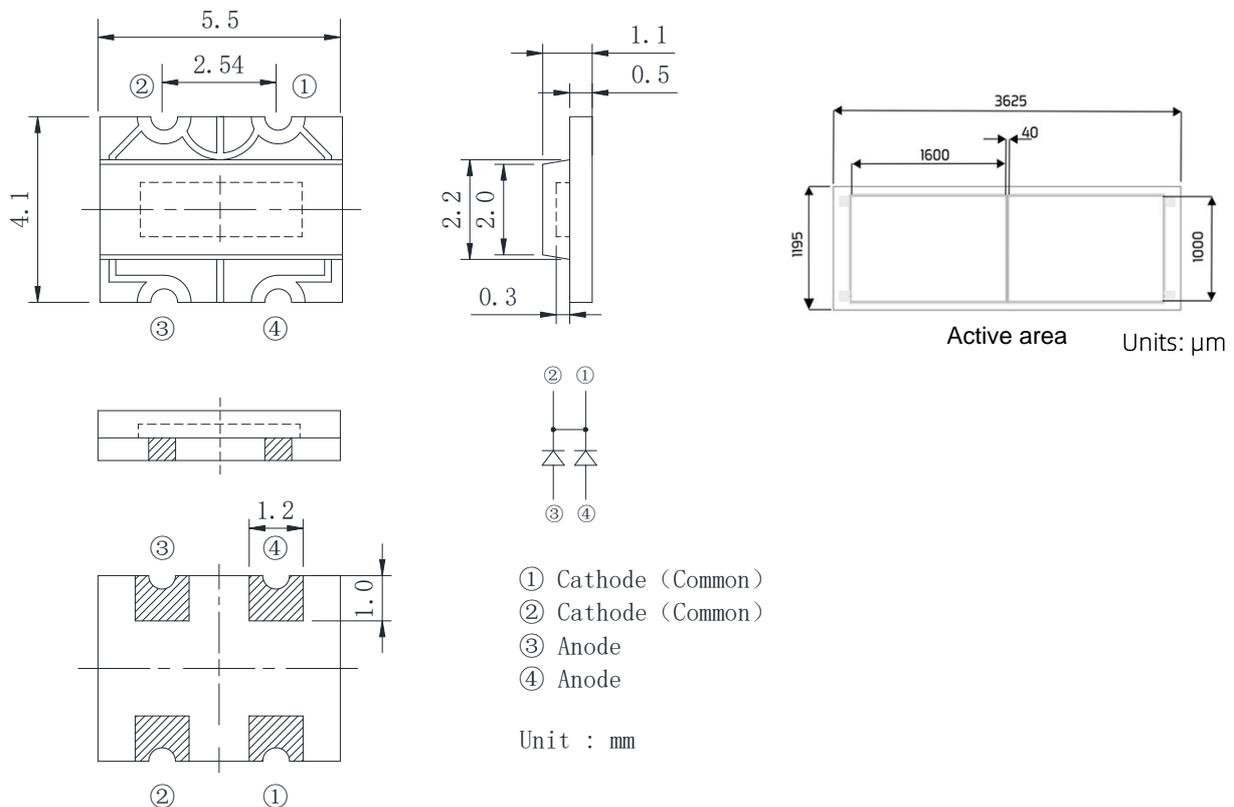
- Position sensors
- Differential light measurement
- Auto focus

KEY CHARACTERISTICS

Parameter	Value	Unit
Photodiode	(2)1.6×1.0	mm
Peak wavelength	850	nm
Dark current@30°C, Vr=2V	1.0	nA



DIMENSIONS



Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Min.	Max.	Unit
Soldering temperature	T _{sol}	---	260	°C
Storage Temperature	T _{stg}	-30	90	°C
Operating Temperature	T _{opr}	-20	80	°C

Electro-Optical Characteristics (Ta=25°C)

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
A _{pd}	Active area	A1, A2 width height	---	1.60 1.00	---	mm
λ	Spectral response range	---	400	---	1100	nm
λ _{peak}	Peak sensitivity wavelength	---	---	850	---	nm
I _{sc}	Short circuit current	EV=1000 Lx *1	---	17	---	uA
S _{peak}	Peak sensitivity	---	---	0.55	---	A/W
I _d	Dark current	C1,C2 Vr=10V	---	---	20	nA
C _j	Junction capacitance	C1,C2 Vr=10V	---	20	---	pF
Δθ	Half angle	---	---	65	---	deg.

*1. Under tungsten lamp of color temp.=2856K

Spectral Sensitivity

