

# LIGHT



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 ,Vr=2V	1.0	nA

# DIMENSIONS

ſ		3625 →14 <sup>40</sup>	 
	1600		
1195			1000
•			¥

Part No.	LT4540	Page	2 of 3
			LG-QR-R009-01



# LIGHT



## Absolute Maximum Ratings (Ta=25 )

Parameter	Symbol	Min.	Max.	Unit
Soldering temperature	T <sub>sol</sub>		260	
Storage Temperature	T <sub>stg</sub>	-30	90	
Operating Temperature	T <sub>opr</sub>	-20	80	

## Electro-Optical Characteristics (Ta=25)

Symbol	Parameter	Conditions	Min.	Тур.	Max.	Unit
A <sub>pd</sub>	Active area	A1, A2 width height		1.60 1.00		mm
λ	Spectral response range		400		1100	nm
$\lambda_{\text{peak}}$	Peak sensitivity wavelength			850		nm
I <sub>sc</sub>	Short circuit current	EV=1000 Lx *1		17		uA
S <sub>peak</sub>	Peak sensitivity			0.55		A/W
۱ <sub>d</sub>	Dark current	C1,C2 Vr=10V			20	nA
Cj	Junction capacitance	C1,C2 Vr=10V		20		pF
θ	Half angle			65		deg.

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

### Spectral Sensitivity

