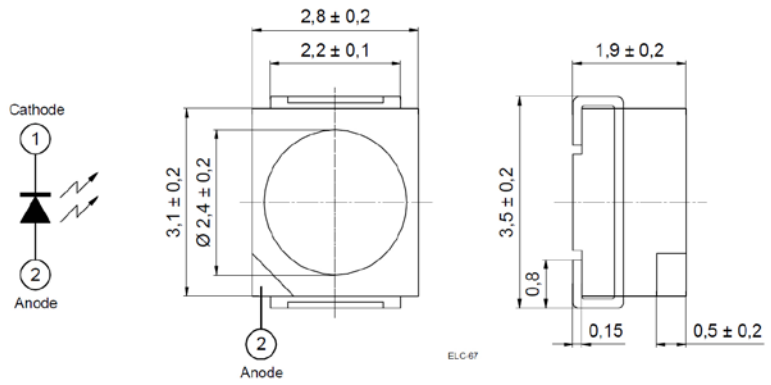
ROITHNER LASERTECHNIK GmbH
WIEDNER HAUPTSTRASSE 76 1040 VIENNA AUSTRIA
TEL. +43 1 586 52 43 -0, FAX. -44, OFFICE@ROITHNER-LASER.COM

ELS-740-994

TECHNICAL DATA

Infrared LED, SMD

Radiation	Type	Technology	Case
Infrared	SMD	AlGaAs/AlGaAs	TOPLED



Description

High-power, high speed LED in TOPLED® PLCC-2 package, compact design allows for easy circuit board mounting and assembling of arrays

Applications

Optical communications, remote control, light barriers, measurement applications and security systems, automation

Absolute Maximum Ratings

at T_{amb} = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
DC forward current		I_F	50	mA
Peak forward current	$t_p \leq 50$ µs, $t_p/T \leq 0.5$	I_{FM}	100	mA
Surge forward current	$t_p \leq 10$ µs	I_{SFM}	1000	mA
Power dissipation		P	125	mW
Operating temperature range		T_{amb}	-40 to +85	°C
Storage temperature range		T_{stg}	-40 to +90	°C

Electrical and Optical Characteristics

at T_{amb} = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F =50 mA	V_F		2.0	2.5	V
Reverse voltage	I_F = 100 µA	V_R	5			V
Radiant power	IF = 50 mA	Φ_e	5.0	6.5		mW
Peak wavelength	IF = 50 mA	λ_p	730	740	750	nm
Spectral bandwidth at 50%	IF = 50 mA	$\Delta\lambda_{0.5}$		30		nm
Viewing angle	IF = 50 mA	φ		120		deg.
Switching time	IF = 50 mA	t_r , t_f		30		ns