

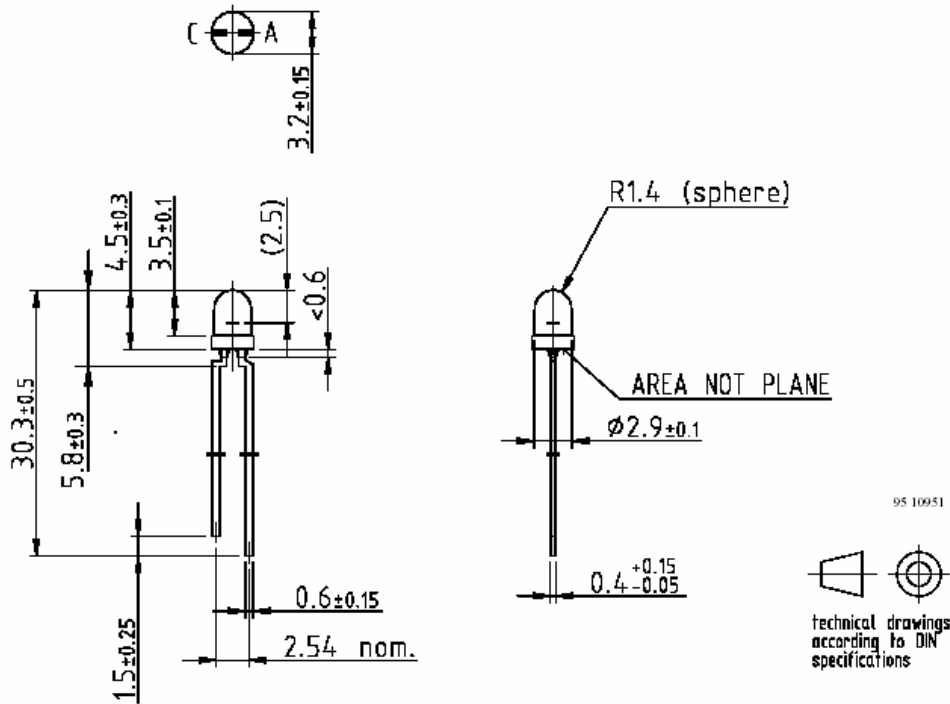
Radiation	Type	Technology	Case
Infrared	Water clear	AlGaAs/GaAs	3 mm plastic lens

Description

High-power, high-speed, double heterostructure with removed substrate, with standoff leads

Applications

Optical communications, safety equipment, automation



Note: Special packages without standoff available on request

Maximum Ratings

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

Parameter	Test conditions	Symbol	Value	Unit
Forward current (DC)		I _F	100	mA
Peak forward current	(t _p ≤ 50 μs, t _p /T = 1/2)	I _{FM}	200	mA
Surge forward current	(t _p ≤ 10 μs)	I _{FSM}	2000	mA
Reverse voltage	I _R = 100 μA	V _R	5	V
Operating temperature range		T _{amb}	-20 to +100	°C
Storage temperature range		T _{stg}	-55 to +100	°C
Soldering temperature	t ≤ 5 s, 3 mm from case	T _{sd}	260	°C

Optical and Electrical Characteristics

$T_{amb} = 25^{\circ}\text{C}$, unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 100 \text{ mA}$	V_F		1.25	1.5	V
Radiant power	$I_F = 100 \text{ mA}$	Φ_e	20	25		mW
Radiant intensity	$I_F = 100 \text{ mA}$	I_e				mW/sr
Peak wavelength	$I_F = 100 \text{ mA}$	λ_p	930	935	950	nm
Spectral bandwidth at 50%	$I_F = 100 \text{ mA}$	$\Delta\lambda_{0.5}$		75		nm
Viewing angle	$I_F = 50 \text{ mA}$	2φ		40		deg.
Switching time	$I_F = 100 \text{ mA}$	t_r, t_f		1000		ns