

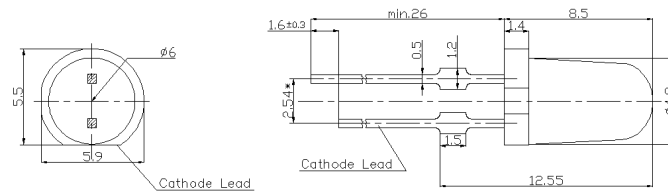
Radiation	Type	Technology	Case
Infrared	Water clear	AlGaAs/AlGaAs	5 mm plastic lens

**Description**

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

**Applications**

Optical communications, safety equipment, automation



all dimensions tolerance  $\pm 0.1$  except given ones  
\* at the bottom of LED

**Maximum Ratings**

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

Parameter	Test conditions	Symbol	Value	Unit
Forward current (DC)		$I_F$	100	mA
Peak forward current	$(t_p \leq 50 \mu\text{s}, t_p/T = 1/2)$	$I_{FM}$	200	mA
Surge forward current	$(t_p \leq 10 \mu\text{s})$	$I_{FSM}$	2000	mA
Reverse voltage	$I_R = 100 \mu\text{A}$	$V_R$	5	V
Operating temperature range		$T_{amb}$	-20 to +100	$^\circ\text{C}$
Storage temperature range		$T_{stg}$	-55 to +100	$^\circ\text{C}$
Mass		m	0.33	g

**Optical and Electrical Characteristics**

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

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 100 \text{ mA}$	$V_F$		1.7	2.2	V
Radiant power	$I_F = 100 \text{ mA}$	$\ddot{O}_e$		35		mW
Radiant intensity	$I_F = 100 \text{ mA}$	$I_e$		190		mW/sr
Peak wavelength	$I_F = 20 \text{ mA}$	$\lambda_p$	830	840	850	nm
Spectral bandwidth at 50%	$I_F = 20 \text{ mA}$	$\Delta\lambda_{0.5}$		35		nm
Viewing angle	$I_F = 20 \text{ mA}$	$\varphi$		20		deg.
Switching time	$I_F = 100 \text{ mA}$	$t_r, t_f$		40		ns