

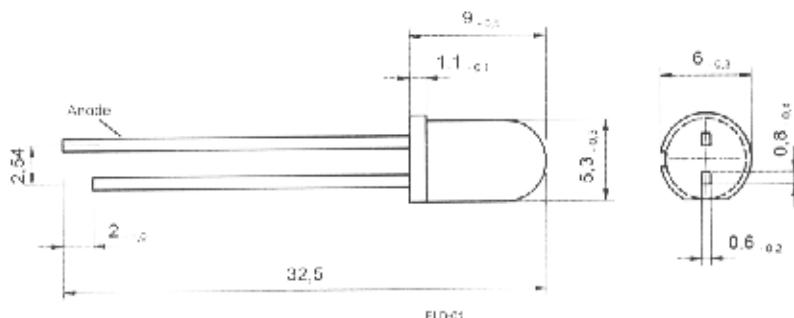
Radiation	Type	Technology	Case
Infrared	Water clear	AlGaAs/AlGaAs	5 mm plastic lens

**Description**

High-power, high-speed, double heterostructure with removed substrate, without standoff leads

**Applications**

Optical communications,  
safety equipment, automation



Note: Special packages with standoff available on request

**Maximum Ratings**

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

Parameter	Test conditions	Symbol	Value	Unit
Forward current (DC)		$I_F$	50	mA
Peak forward current	( $t_p \leq 50 \mu\text{s}$ , $t_p/T = 1/2$ )	$I_{FM}$	100	mA
Surge forward current	( $t_p \leq 10 \mu\text{s}$ )	$I_{FSM}$	1000	mA
Reverse voltage	$I_R = 100 \mu\text{A}$	$V_R$	5	V
Operating temperature range		$T_{amb}$	-20 to +100	°C
Storage temperature range		$T_{stg}$	-55 to +100	°C
Soldering temperature	$t < 5 \text{ s}$ , 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	$I_F = 50 \text{ mA}$	$V_F$		1.65	1.8	V
Radiant power	$I_F = 50 \text{ mA}$	$\Phi_e$	11	16		mW
Radiant intensity	$I_F = 50 \text{ mA}$	$I_e$	55	80		mW/sr
Peak wavelength	$I_F = 50 \text{ mA}$	$\lambda_p$	770	780	790	nm
Spectral bandwidth at 50%	$I_F = 50 \text{ mA}$	$\Delta\lambda_{0.5}$		28		nm
Viewing angle	$I_F = 50 \text{ mA}$	$2\phi$		18		deg.
Switching time	$I_F = 50 \text{ mA}$	$t_r, t_f$		40		ns