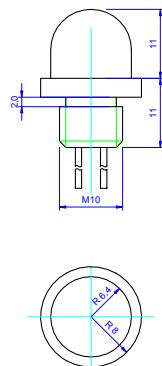


Radiation	Type	Technology	Case
Infrared	40 degrees	AlGaAs/AlGaAs	plastic lens, metal case

**Description**

High-power infrared-LED module, double-hetero AlGaAs structure, six chips are soldered on metal header, fast switching time

**Outline:** H=11,8 mm ( $\pm 0,5$ )

**Applications**

Illumination for CCD-cameras, remote control and optical communications, traffic signals, measurement systems

**Absolute Maximum Ratings**

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

Parameter	Test conditions	Symbol	Value	Unit
DC forward current	on heat sink	$I_F$	250	mA
Peak forward current	$t_p \leq 10 \mu\text{s}, f \leq 500 \text{ Hz}$	$I_{FM}$	2000	mA
Reverse voltage*	$I_R = 10 \mu\text{A}$	$V_R$	20	V
Power dissipation	on heat sink ( $S \geq 50 \text{ cm}^2$ )	P	3	W
Operating temperature range		$T_{amb}$	-60 to +85	°C
Storage temperature range		$T_{stg}$	-60 to +85	°C
Junction temperature		$T_j$	100	°C

\*Always protect the LED source against reverse currents

**Optical and Electrical Characteristics**

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

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 100 \text{ mA}$	$V_F$		10.5		V
Forward voltage	$I_F = 250 \text{ mA}$	$V_F$		13		V
Radiant power	$I_F = 250 \text{ mA}$	$\Phi_e$		175		mW
Radiant intensity	$I_F = 250 \text{ mA}$	$I_e$		380		mW/sr
Radiant intensity	$I_F = 250 \text{ mA}$	$I_e$		450		mW/sr
Peak wavelength	$I_F = 250 \text{ mA}$	$\lambda_p$	790	810	830	nm
Spectral bandwidth at 50%	$I_F = 250 \text{ mA}$	$\Delta\lambda_{0,5}$		30		nm
Viewing angle	$I_F = 250 \text{ mA}$	$2\varphi$		40		deg
Switching time	$I_F = 250 \text{ mA}$	$t_r, t_f$		150		ns
Thermal resistance junction-case		$R_{thJC}$		10		K/W