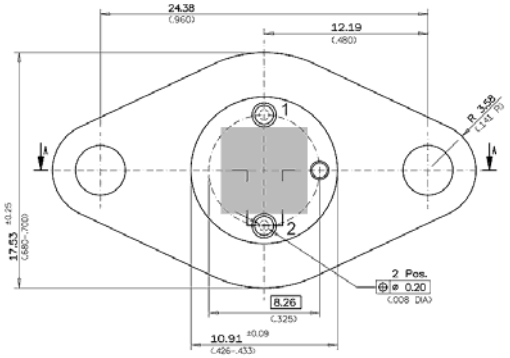
LED730-66-16100

TECHNICAL DATA

SUPER HIGH POWER INFRARED LED

Structure: **16 power LED chips, 4 x 4 parallel array**
Peak Wavelength: **typ. 730 nm**
Optical Output Power: **typ. 600 mW cw @ 1.4 A**
Package: **TO-66 with silicone + epoxy resin**





1 = anode
2 = cathode



Absolute Maximum Ratings (Tc = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Power dissipation	P_D	20	W
DC forward current **)	I_F	1.8	A
Pulse forward current *)	I_{FP}	-	A
Reverse voltage	V_R	5	V
Operating lifetime	T	50.000	h
Operating case temperature	T_{OP}	-30 .. **+70**	°C
Storage temperature	T_{STG}	-60 .. +85	°C

*) Pulse width ≤ 10 µs, f ≤ 500 Hz

Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Radiant flux	$\theta_{e\ (730\ nm)}$	I_F = 1.4 A	550	600	650	mW
Radiant flux	$\theta_{e\ (730\ nm)}$	I_F = 2.0 A	-	-	-	mW
Luminous intensity	$I_{v\ (730\ nm)}$	I_F = 1.4 A	-	-	-	cd
Forward voltage	V_F	I_F = 1.4 A	7.0	7.4	8.0	V
Reverse current	I_R	V_R = 5 V			10	µA
Peak wavelength	λ_P	I_F = 1.4 A	720	730	740	nm
Spectrum half width	$\Delta\lambda$	I_F = 1.4 A		30		nm
Emission angle FWHM	$\theta_{½}$	I_F = 1.4 A		±60		°

IMPORTANT NOTE FOR SAFE OPERATION

This high power LED must be cooled! **) Use a heat sink with a thermal resistance ≤8K/W. Maximum uncooled allowed operation current ≤80 mA. Do not view directly into the emitting area of the LED when in operation!



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