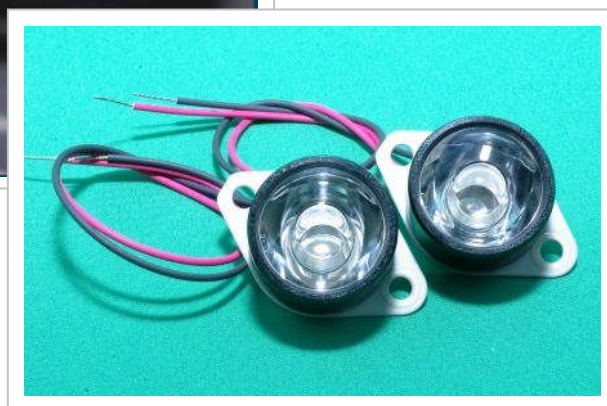


PRODUCT NEWS

Super beam High Power Infrared LED: AIR-series

Alpha-One offers super high radiant intensity infrared LED with original designed lens which can be realized well-controlled beam light for surveillance system.

**Features:**

- High radiant intensity
- Narrow viewing angle (θ 1/2: $\pm 3.5^\circ$)
- Low power consumption

Application:

- IR illuminator for surveillance cameras
- Light source for various sensors and more...

Absolute Maximum Rating

Parameter	Symbol	Rating	Units
Forward Current ^{*1}	I_F	650	mA
Pulse Forward Current ^{*2}	I_{FP}	4	A
Power Dissipation	P_d	1.65	W
Reverse Voltage	V_R	5	V
Operating Temperature	T_{opr}	-20~+85	$^\circ\text{C}$
Storage Temperature	T_{stg}	-30~+85	$^\circ\text{C}$

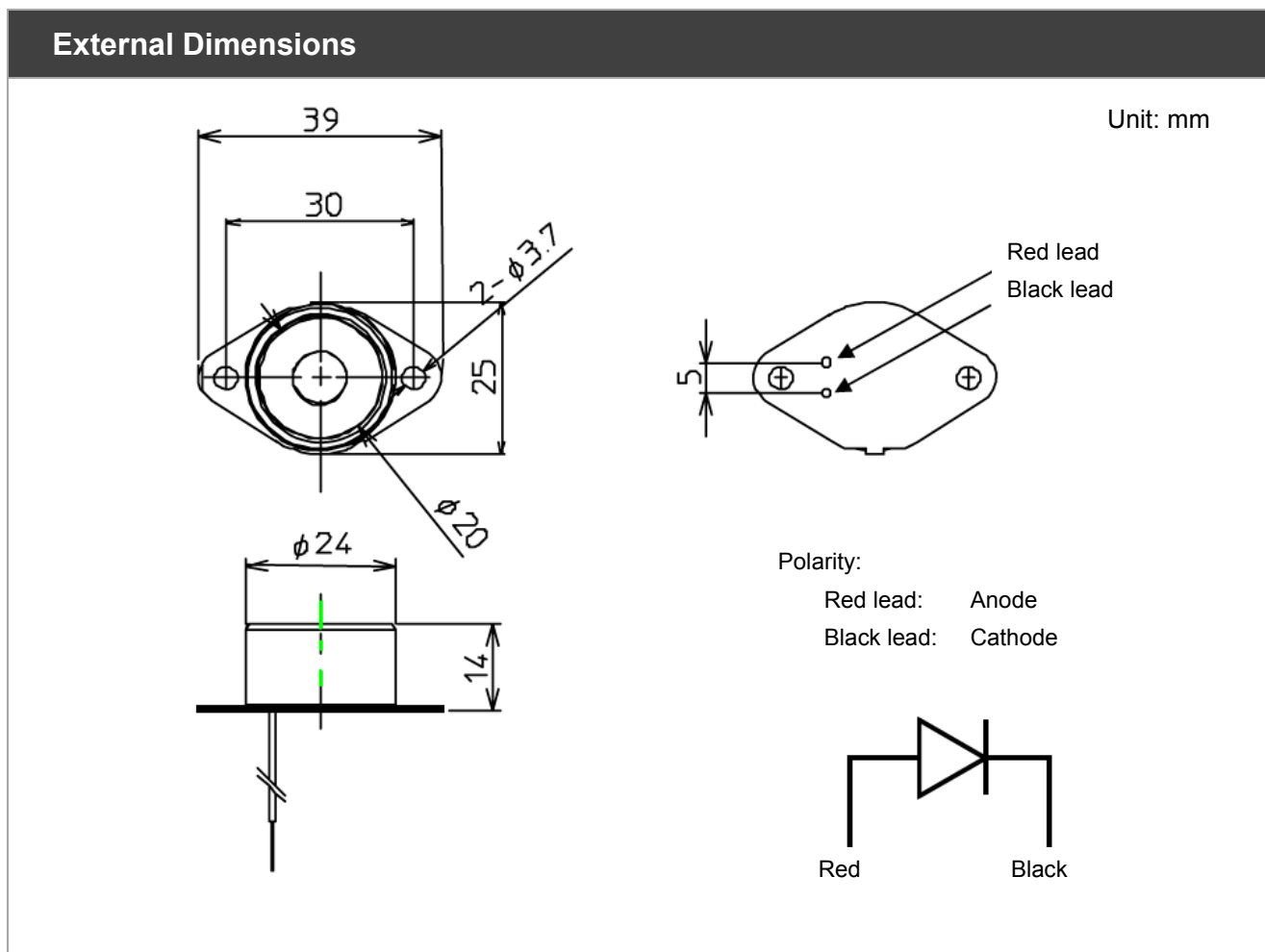
*1) The maximum temperature at board should be within 85°C

*2) Pulse condition Duty: 0.01%, Pulse width: $10\mu\text{s}$

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Electrical/Optical Characteristics (Ta=25°C)						
Parameter	Symbol	Test Conditions	AIRS850-1.	AIRS870-1	AIRD940-1	Unit
Total Radiated Power	P _O	I _F =100mA	20	20	16	mW
Forward Voltage	V _F	I _F =100mA	Typ. 1.4 / Max. 1.9		1.2	V
Reverse Current	I _R	V _R =5V	Max. 10			μ A
Peak wavelength	λ _p	I _F =100mA	850	870	940	nm
Spectral Half Width	Δλ	I _F =100mA	40	40	50	nm
Radiant Intensity	I _E	I _F =100mA	1000	1000	800	mW/sr
		I _F =650mA	6500	6000	4000(600mA)	mW/sr
Viewing Half Angle	θ _{1/2}	I _F =100mA	±3.5			deg

Unless otherwise specified, the indicated value is typical.



The one with the other peak-wavelength including the visible rays is also available.

If you have any questions, please make contact with us ASAP!

Then, we will make the best proposal and introduce the most suitable model for you.