

HSL Series

Low Cost IR Sources

The HSL Series provides reliable, low cost IR sources for nondispersive infrared (NDIR) gas detection by IR light absorption. In combination with our HTS Multichannel Sensors, they can be used to detect gases like CO₂ or hydrocarbons (HC).

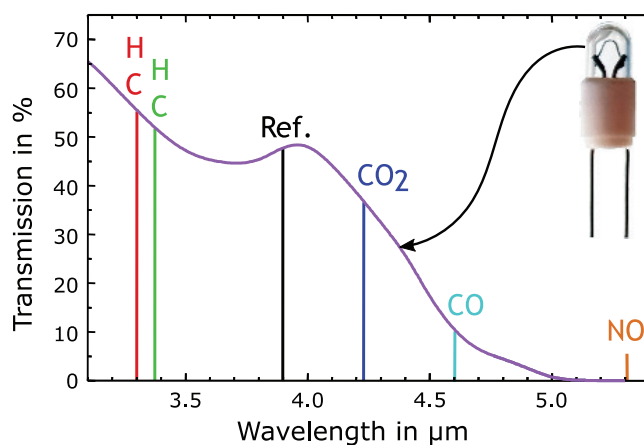
The HSL Series features a small design, good processability and a long lifetime and is available in two versions; either with 60 or 115 mA lamp current.

The IR sources meet all requirements of the European Union RoHS Directive.

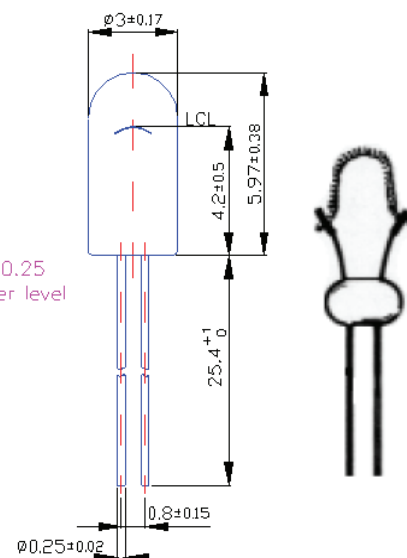
Spectral Transmission of Glass Housing

The IR light emittance is strongly influenced by the quartz glass housing of the filament. The transmittance for wavelengths above 4.5 µm is rather low.

Consequently, to detect gases like CO or NO, we recommend using our high performance IR sources provided by the HSL EMIRS Series.



Dimensions HSL 5-60



Glass thickness: 0.25
LCL ... light center level

Characteristics

	HSL 5-115 HSL 5-115 S	HSL 5-60	Unit
Supply voltage	5	5	Volt
Current	115	60	mA
Brightness	0.15	0.05	MSCP ^{a)}
Filament	C-2R	C-2R	f
Operating temperature	-20...100	-20...100	°C
Average lifetime ^{b)}	40 000	100 000	hours

a) MSCP (mean spherical candle power) can be converted to lumen by multiplication of MSCP value with 4π (12.57)

b) At 5V, AC

Ordering Information

HSL	Heimann Sensor Lamp
5	Supply voltage
60, 115	Typical current and package size
-, S	Socket or non-socket type

E.g.: HSL 5-115-S
HSL 5-60