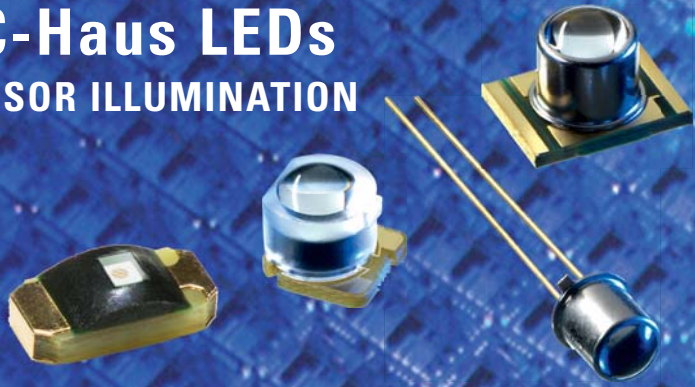


iC-Haus LEDs

SENSOR ILLUMINATION



iC-Haus LEDs with their outstanding characteristics have been developed for optical sensor and encoder applications, where excellent beam quality is required for high contrast ratio. These LEDs can also be used in optical distance meters and modulated light barriers which benefit from high speed switching characteristics. The robust LED light source provides excellent performance regarding high temperature operation and long term reliability.

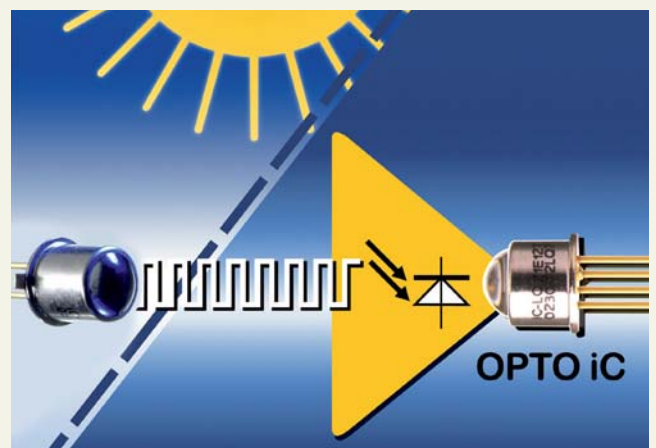
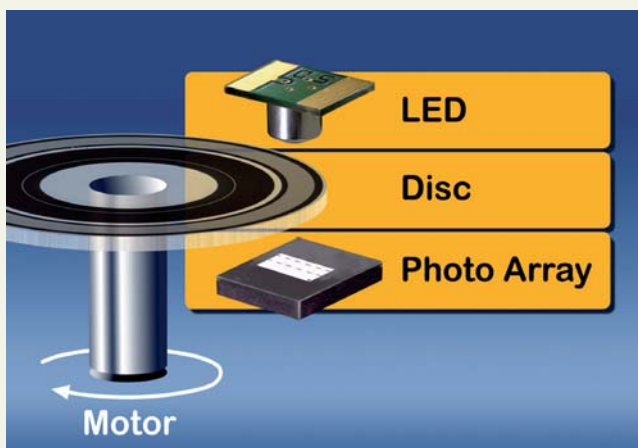
Features & Applications

- Optimized irradiance pattern
- High operating temperature range of -40 to 125 °C
- Illumination for high resolution optical encoders
- Modulated light barriers
- Optical distance metering applications

Key Specifications


LED	Package	Spot Size	Optical Power @ 20 mA	Wavelength	Temp. Range	Beam Angle
iC-TL6	BLCC2 1206	0.3 mm	3.5 mW	640 nm	-40 to +125 °C	140 °
iC-TL46	TO46-2L1	3.4 mm	5.0 mW	460 nm	-40 to +100 °C	3.5 °
	SD1C	3.4 mm	5.0 mW	460 nm	-40 to +100 °C	3.5 °
iC-TL85	TO46-2L1	3.5 mm	1.8 mW	850 nm	-40 to +125 °C	4.5 °
	TO46-2F1	/	2.7 mW	850 nm	-40 to +125 °C	Lambertian radiation pattern
iC-SN85	SN1C	6.0 mm	8.1 mW	850 nm	-40 to +125 °C	3.0 °
	SN2C	6.0 mm	8.1 mW	850 nm	-40 to +125 °C	3.0 °
iC-SD85	SD1C	3.5 mm	1.8 mW	850 nm	-40 to +125 °C	4.5 °
	SD2C	/	6.0 mW	850 nm	-40 to +125 °C	Lambertian radiation pattern
	SD3C	3.5 mm	1.8 mW	850 nm	-40 to +125 °C	4.5 °
iC-SG85	SG1C	8.0 mm	4.0 mW	850 nm	-40 to +125 °C	3.0 °
	SG4C	8.0 mm	4.0 mW	850 nm	-40 to +125 °C	3.0 °

Application Examples




iC-Haus LEDs SENSOR ILLUMINATION


Packages


iC-TL6	Recommended Sensors
 <p>BLCC2 1206 3.2 mm x 1.6 mm x 1 mm</p>	Secondary optics required

iC-SD85	Recommended Sensors
 <p>SD1C 8 mm x 6 mm x 5.3 mm</p>	iC-LSB, iC-LSC iC-LSHB, iC-LSHC iC-PN Series iC-PNH Series iC-PD Series iC-PT H-Series


 <p>SD2C 7.75 mm x 5 mm x 1.85 mm</p>	Secondary optics required
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 <p>SD3C 7.7 mm x 6.3 mm x 4.89 mm</p>	iC-LSB, iC-LSC iC-LSHB, iC-LSHC iC-PN Series iC-PNH Series iC-PD Series iC-PT H-Series
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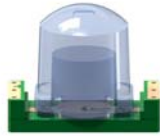

iC-SG85	Recommended Sensors
 <p>SG1C 11 mm x 11.4 mm x 10.53 mm</p>	iC-LG iC-LGC
 <p>SG4C 15.1 mm x 10.5 mm x 10.6 mm</p>	iC-LG iC-LGC

iC-TL46	Recommended Sensors
 <p>T046-2L1 Cap Ø 4.7 mm, h 5.39 mm</p>	iC-LSB, iC-LSC iC-LSHB, iC-LSHC iC-PN Series iC-PNH Series iC-PD Series iC-PT H-Series

 <p>SD1C 8 mm x 6 mm x 5.3 mm</p>	iC-LSB, iC-LSC iC-LSHB, iC-LSHC iC-PN Series iC-PNH Series iC-PD Series iC-PT H-Series
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iC-TL85	Recommended Sensors
 <p>T046-2L1 Cap Ø 4.7 mm, h 5.39 mm</p>	iC-LSB, iC-LSC iC-LSHB, iC-LSHC iC-PN Series iC-PNH Series iC-PD Series iC-PT H-Series

 <p>T046-2F1 Cap Ø 4.7 mm, h 3.2 mm</p>	Secondary optics required
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iC-SN85	Recommended Sensors
 <p>SN1C 12 mm x 6 mm x 9.6 mm</p>	iC-LNG iC-LNB
 <p>SN2C 8.5 mm x 8 mm x 9.53 mm</p>	iC-LNG iC-LNB

TO-Package: These LEDs are hermetically sealed in a metal package and can be used in extremely demanding environments. High resistance to humidity and temperature cycling.

COB-Package: These LEDs are bonded onto a PC-board / Ceramic-substrate and assembled with a high-quality molded aspheric lens. Package designs with Chip-On-Board configurations or specific apertures / optics can be customized.

This preliminary information is not a guarantee of device characteristics or performance. All rights to technical changes reserved.