

High-Performance Infrared LED for Extreme Environments

Defense & Security



OD-110WISOLHT

KEY FEATURES

- 880 nm peak emission wavelength
- Wide 110° half-intensity beam angle
- 60 mW (min) to 120 mW (typ) total power output
- High temperature and industrial-grade

APPLICATIONS

- Industrial Systems
- Night Vision
- Surveillance
- Stealth Illumination
- Optical Encoders

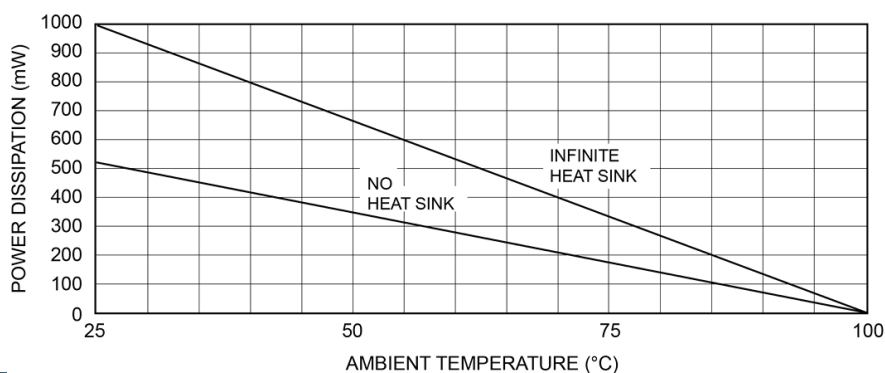
Opto Diode's OD-110WISOLHT is a high-temperature, wide-angle infrared light-emitting diode (IRLED) specifically engineered for demanding defense and industrial applications. With a peak emission wavelength of 880 nm, this IRLED is optimized for covert illumination, making it ideal for military aircraft lighting and other security-focused systems requiring reliable performance in extreme environments.

Housed in a durable 2-lead TO-39 can with an isolated case, the OD-110WISOLHT delivers up to 120 mW of optical power, offering strong IR output while maintaining thermal resilience. Its 110° half-intensity beam angle ensures wide-area illumination, and with 20 ns rise/fall times, the device supports fast signal response—critical for time-sensitive defense applications.

A typical forward voltage of 1.75 V (max 2 V) and reverse breakdown voltage range of 5 to 30 V ensure robust electrical performance. A spectral bandwidth of 55 nm further enhances its effectiveness for broad IR coverage in low-visibility conditions.

Featured Product

Maximum Rated Thermal Derating Curve



Model Number	Typ. Power Output (mW)	Peak Emission Wavelength (nm)	Typ. Forward Voltage (V)
OD-110L	110	850nm @ 50mA	1.7V @ 500mA
OD-110W	140	850nm @ 50mA	1.7V @ 500mA
OD-110LISOLHT	100	880nm @ 50mA	1.75V @ 500mA
OD-110WISOLHT	120	880nm @ 50mA	1.75V @ 500mA
OD-250	250	850nm @ 50mA	1.7V @ 500mA
OD-663	170	880nm @ 50mA	4.5V @ 300mA
OD-663-850	425	850nm @ 50mA	4.8V @ 300mA
OD-666	330	880nm @ 50mA	9.0V @ 300mA
OD-669	500	880nm @ 50mA	13.5 @ 300mA
OD-669-850	1250	850nm @ 50mA	13.5 @ 300mA

