

3270 nm DFB Laser Specifications

Model Number: NL3270-T

Operating Parameters

PARAMETER	UNITS	MIN.	MAX.
Storage Temperature	°C	-40	50
Case Operating Temperature	°C	-20	50
TEC Current	A		1.6
Laser Diode Forward Current	mA		200
Laser Diode Reverse Voltage	V		2

Laser Characteristics

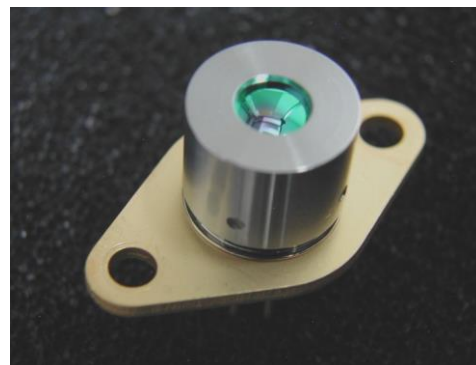
PARAMETER	CONDITION	UNITS	TYPICAL VALUE
Threshold Current	5 °C	mA	60
Operating Wavelength	160 mA & 5 °C	nm	3270 ± 1
Operating Power	160 mA & 5 °C	mW	1.0
Forward Voltage	160 mA & 5 °C	V	2.2
Thermistor Resistance	25 °C	kΩ	10 ± 0.1
Thermistor B constant	25 °C		3890
Temperature Tuning		nm/°C	0.27
Current Tuning		nm/mA	0.035
Side Mode Suppression Ratio (SMSR)		dB	> 25

Package:

- TO-66 hermetically sealed, R<0.1%
- AR coated Sapphire window
- Internal TEC and thermistor

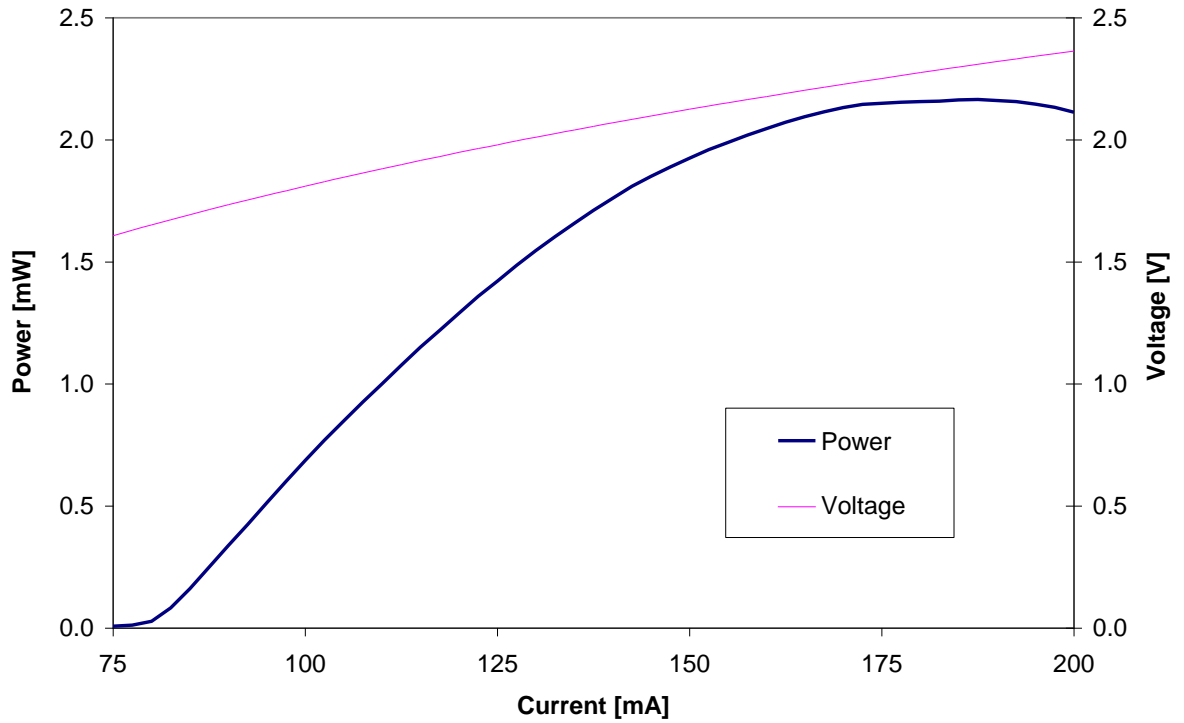
Collimation Lens (optional):

- Aspheric AR coated Lens, R<1%
- Beam diameter (1/e²): ~ 4 mm
- Beam divergence: ~ 1 mrad

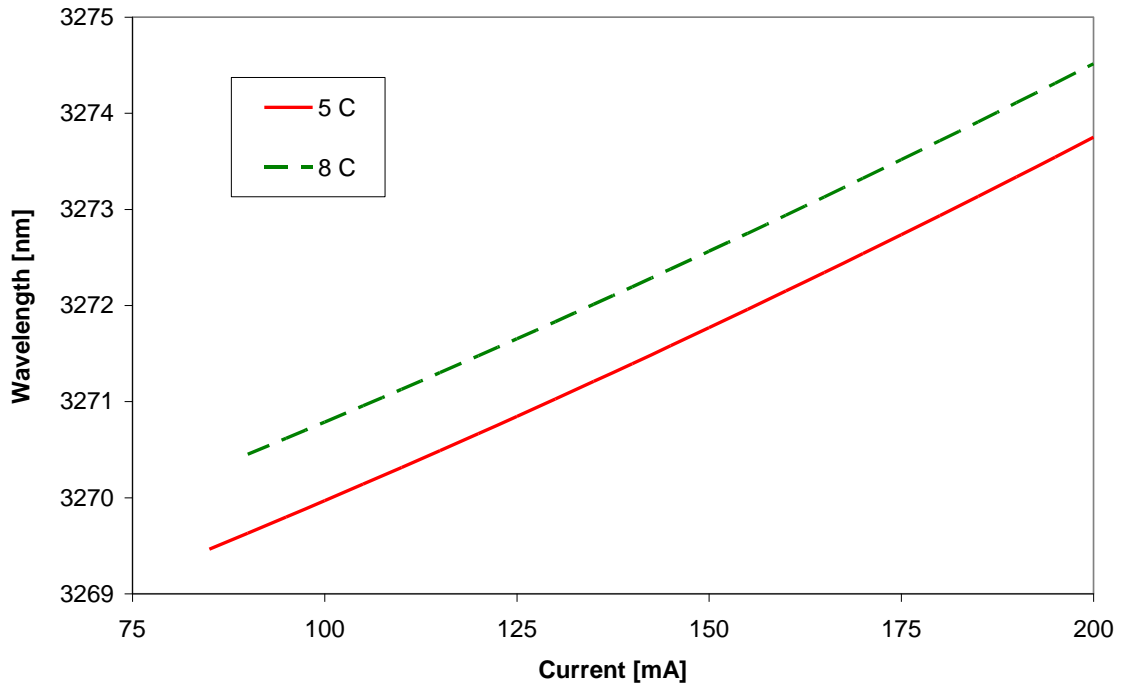


TO66 package with collimation lens attached

Optical Power & Forward Voltage vs Drive Current at 5 °C

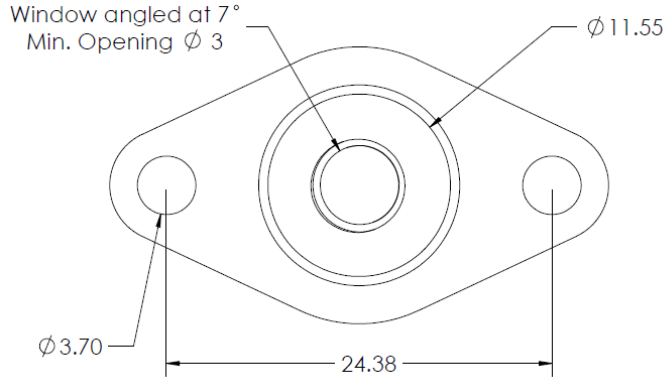


Peak Wavelength vs Drive Current

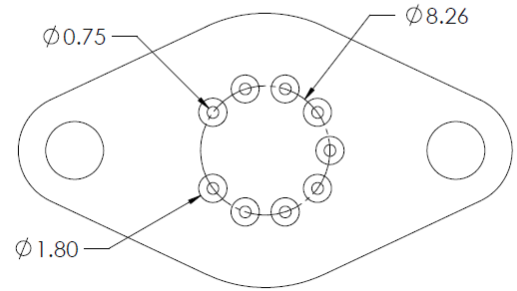


Outline Diagrams for TO66 Package

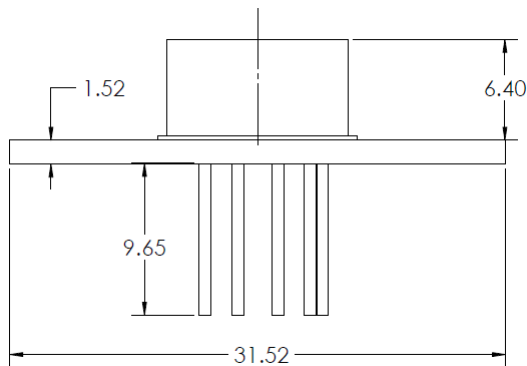
Top View



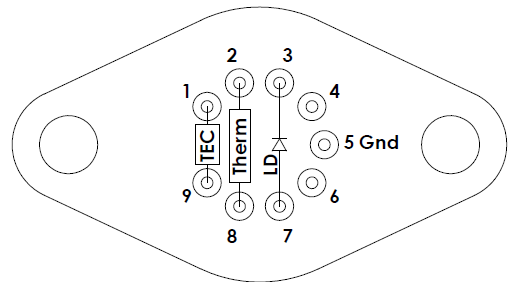
Bottom View



Front View



Schematic Diagram (Bottom View)

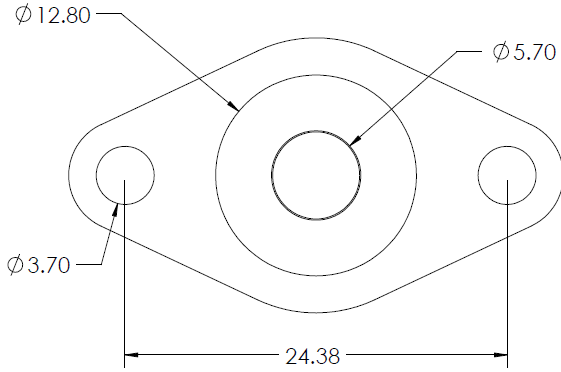


All dimensions in mm

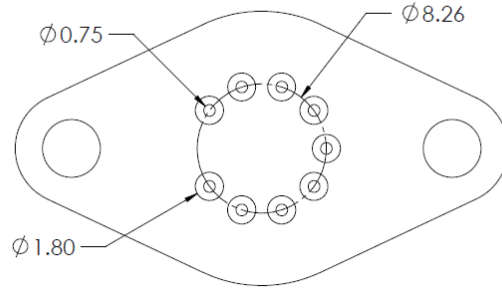
Pin Number	Description
1	TEC (+)
2	Thermistor
3	LD Cathode (-)
4	Not Used
5	Ground
6	Not Used
7	LD Anode (+)
8	Thermistor
9	TEC (-)

Outline Diagrams for TO66 Package with Collimation Lens

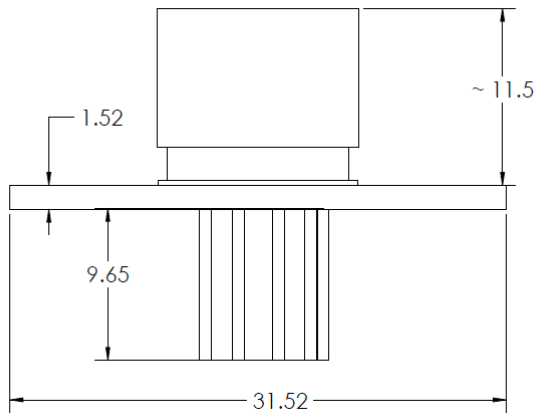
Top View



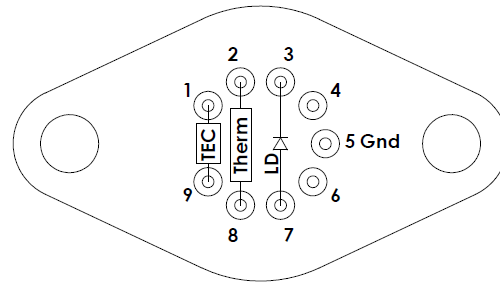
Bottom View



Front View



Schematic Diagram (Bottom View)



TO-66 Header with Collimation Lens

All dimensions in mm

Pin Number	Description
1	TEC +
2	Thermistor
3	LD Cathode (-)
4	Not Used
5	Ground
6	Not Used
7	LD Anode (+)
8	Thermistor
9	TEC -