

NDL4201A

850 nm OPTICAL FIBER COMMUNICATIONS AlGaAs LIGHT EMITTING DIODE

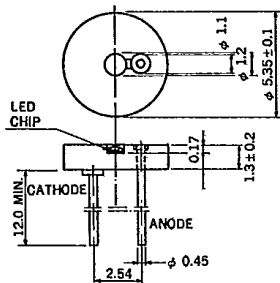
DESCRIPTION

NDL4201A is an AlGaAs double heterostructure light emitting diode designed for a light source of medium distance and medium transmission capacity data link.

FEATURES

- Optical output power $P_O = 1.0$ mW
- Cutoff frequency $f_c = 35$ MHz

PACKAGE DIMENSIONS in millimeters



ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

Forward Current	I_F	80	mA
Reverse Voltage	V_R	2.0	V
Operating Case Temperature	T_C	-40 to +70	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to +90	$^\circ\text{C}$

ELECTRO-OPTICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Optical Output Power	P_O	0.6	1.0		mW	$I_F = 50$ mA
Forward Voltage	V_F		1.7	2.3	V	$I_F = 50$ mA
Peak Emission Wavelength	λ_p	840	850	870	nm	$I_F = 50$ mA
Spectral Half Width	$\Delta\lambda$		45	50	nm	$I_F = 50$ mA
Cutoff Frequency	f_c	30	35		MHz	$I_F = 50$ mA, $I_S = 10$ mA p-p, $P_O = -3$ dB
Emitting Area Diameter	ϕ		35		μm	

N E C ELECTRONICS INC

TYPICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

T-41-07

