

OPTICAL FIBER COMMUNICATION
Ge PHOTO DIODE

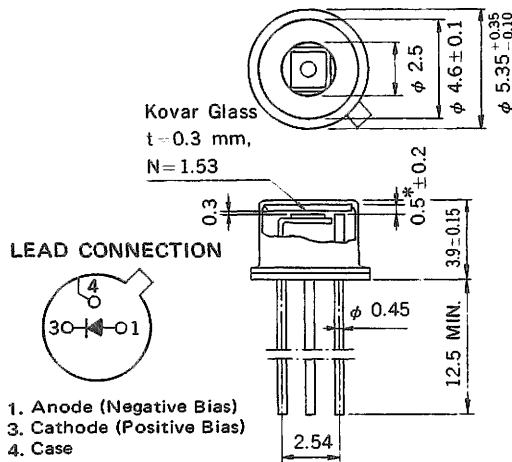
DESCRIPTION

NDL5200 Germanium Photo diode is designed for a detector of long wavelength fiber transmission systems.

FEATURES

- High quantum efficiency. $\eta = 75\%$ (@ 1300 nm)
- Small dark current. $I_D = 0.5 \mu A$
- Short optical length & hermetically sealed package.
- Detecting area size. $\phi 240 \mu m$

PACKAGE DIMENSIONS
in millimeters



- LEAD CONNECTION
1. Anode (Negative Bias)
 3. Cathode (Positive Bias)
 4. Case

*Optical length

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

Reverse Voltage	V_R	20	V
Forward Current	I_F	50	mA
Reverse Current	I_R	1.0	mA
Operating Case Temperature	T_C	-40 to +60	$^\circ C$
Storage Temperature	T_{stg}	-65 to +125	$^\circ C$

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

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Dark Current	I_D		0.5	1.0	μA	$V_R = 6.0 V$
Terminal Capacitance	C_t		7	20	pF	$V_R = 6.0 V, f = 1.0 MHz$
Quantum Efficiency	η	70	75		%	$V_R = 6.0 V, \lambda = 1300 nm$

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

