

FEATURES

- SURFACE MOUNTABLE
- SMALL SIZE FLAT CERAMIC PACKAGE:
7.6 x 12.7 x 3 mm
- HIGH SENSITIVITY
- INTERNAL LOW NOISE GaAs TIA
- INTERNAL SUPPLY BYPASS CAPACITOR
- WIDE OPERATING TEMPERATURE RANGE:
-40 to +85 °C
- DETACHABLE PIGTAIL INTERFACE

DESCRIPTION

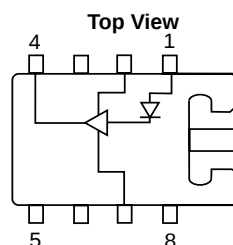
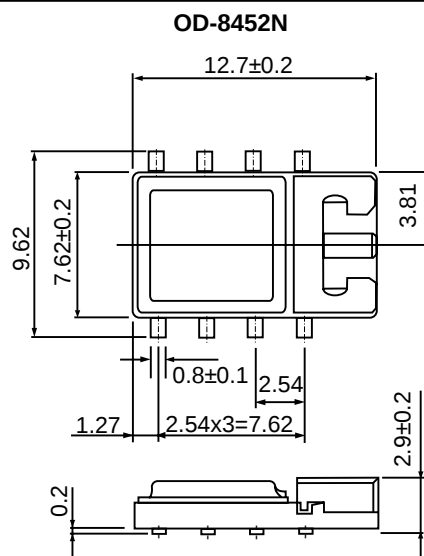
The OD-8452N Series are new surface mount low cost InGaAs-PIN-PD modules with Pre-Amp. These devices can achieve stable operation over a wide temperature range of -40 to +85°C. These modules have a detachable pigtail interface and are packaged in 8 pin surface mount packages, allowing the modules to be soldered like an ordinary IC by standard I.R. reflow soldering process.

The OD-8452N Series can be operated at a speeds of 155/622 Mb/s and are especially suitable for the use of the subscriber loop, SONET and FITL.

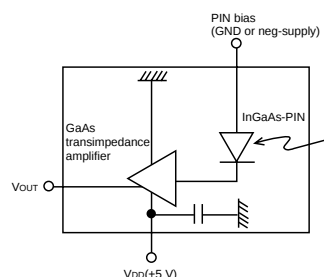
APPLICATIONS

- SUBSCRIBER LOOP
- TELECOMMUNICATIONS
- DATA COMMUNICATIONS
- LOCAL AREA NETWORKS

OUTLINE DIMENSIONS (Units in mm)



PIN	FUNCTION
1	PD Bias
2	GND
3	GND
4	V _{OUT}
5	GND
6	GND
7	V _{DD} (+5V)
8	GND



ELECTRICAL / OPTICAL SPECIFICATIONS (T_A = +25°C)

PART NUMBER			OD-8452NA			OD-8452NB		
SYMBOLS	PARAMETERS AND CONDITIONS ¹	UNITS	MIN	TYP	MAX	MIN	TYP	MAX
	Sensitivity, BER = 10 ⁻¹⁰	dBm		-38			-32	
	Optical Overload	dBm	-3	0		-3	0	
f-3dB	Band Width, 3 dB down	MHz	150	175		500	550	
	Transimpedance	kΩ		17			6	
V _{OP}	Operating Voltage	V	+4.5	+5.0	+5.5	+4.5	+5.0	+5.5
S	Responsivity	A/W		0.9			0.9	

ABSOLUTE MAXIMUM RATINGS¹(T_A = 25°C, unless otherwise specified)

SYMBOLS	PARAMETERS	UNITS	RATINGS
P _{IN}	Optical Input Power	mW	2.0
V _{DD}	Supply Voltage	mA	+7.0
T _{OP}	Operating Temperature	°C	-40 to +85
T _{STG}	Storage Temperature	°C	-40 to +85
T _{SOL}	Lead Soldering Temperature ²	°C	230

Note:

1. Operation in excess of any one of these parameters may result in permanent damage.
2. 30 seconds, reflow soldering.

ORDERING INFORMATION

OD-8452NA	155 Mb/s (STM-1/OC3)
OD-8452NB	622 Mb/s (STM-4/OC12)

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