



REV 09/01

Features

Ultra high speed InGaAs/InP photodiode
High responsivity from 800 to 1600 nm
High optical return loss
Integrated Bias-T
DC coupled output
Low operating bias voltage

Product Description

The PDMH40A is a compact very high-speed photodiode module for the wavelength region 800 to 1600 nm. The package is available with V (standard) or K, male or female electrical connectors and includes a single mode fibre pigtail and a SMB connector for DC bias supply. The module achieves full speed already at 2.5 volt bias and has a DC coupled output. The compact size allows the module to be connected directly to oscilloscope sampling heads or RF network analyzers.

Specifications @ T=25°C

| Parameter | | Sym | Min | Тур | Max | Unit |
|----------------------|---------------------|--------|-----|------|-----|------|
| | | | | | | |
| Conversion gain | λ = 1550 nm | R | 20 | 25 | | V/W |
| | λ = 1300 nm | | 25 | 30 | | |
| Optical pulse energy | | Еp | | | 50 | fJ |
| CW optical power | | P_cw | | | 3 | dBm |
| Bias voltage | | V+ | | <2.5 | 3 | V |
| Dark current | $V_r = 2.5$ | I_D | | 10 | | nA |
| Return Loss* | | R_L | | -25 | | dB |
| Bandwidth | | В | | 40 | | GHz |



