

APDI-80P-RM

InGaAs PHOTODIODE MODULES

These modules APDI-80P-RM are detector modules optical matching InGaAs avalanche photodiode for long wavelength band (800~1650nm) and multi-mode fiber pigtails. These modules are used as detectors for optical time domain reflectometer (OTDR).

Absolute maximum ratings

Reverse current, I_R	0.5mA
Forward current, I_f	10mA
Operating case temperature, T_C :	-40 ÷ +60°C
Storage temperature, T_{stg}	-40 ÷ +60°C

Electrical / optical characteristics (SM, $T=25^\circ\text{C}$)

Parameter		Min.	Typ.	Max.	Unit	Test conditions
Responsivity	S_λ	0.8	1.0		A/W	$M=1, \lambda=1550\text{nm}$
Multiplication factor	M	30	50			$\lambda=1550\text{nm}, V_R=V(I_D=1\mu\text{A})$
Temperature coefficient of breakdown voltage *	δ		0.2		%/°C	
Breakdown voltage	V_{BR}		70	100	V	
Dark current	I_D		5	20	nA	$V_R=0.9V_{BR}$
Capacitance	C_t		0.5	0.75	pF	$V_R=0.9V_{BR}, F=1\text{MHz}$
Cutoff frequency	f_c	1			GHz	$M=1, \lambda=1550\text{nm}, R_L=50\Omega, -3\text{dB}$

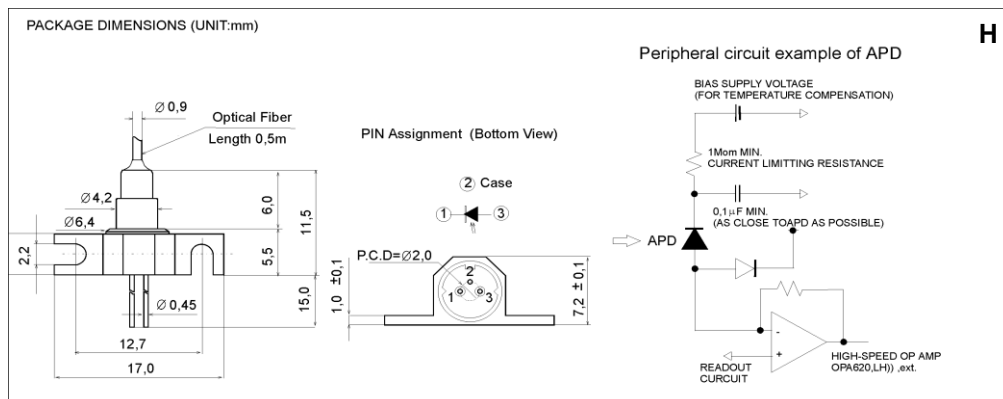
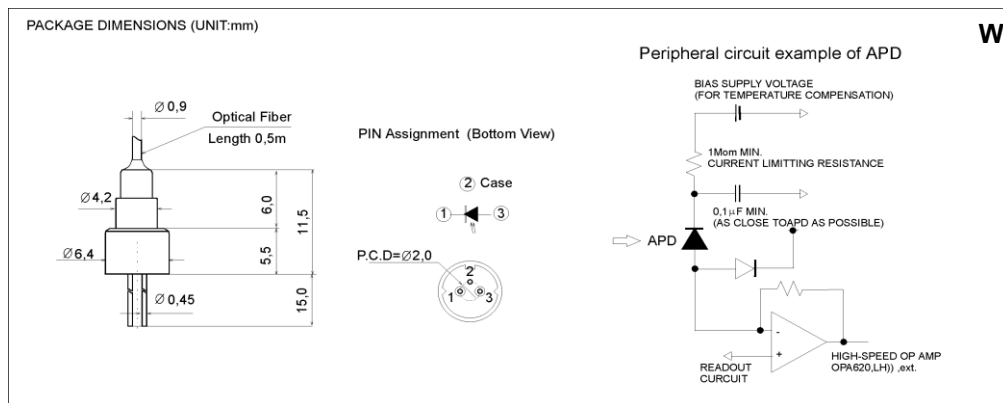
* $\delta = [V_{BR}(25^\circ\text{C}+\Delta T^\circ\text{C}) - V_{BR}(25^\circ\text{C})] / [\Delta T^\circ\text{C} - V_{BR}(25^\circ\text{C})]$

Ordering information

APDI-30P-RM-X-MM(50)-X

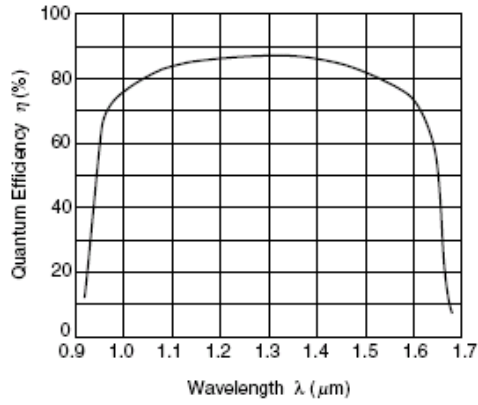
Connector type: **FC/PC, N** – without connector

Case type: **W, H**

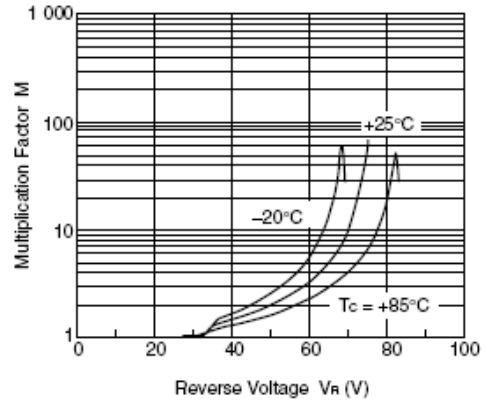


ATTENTION: ELECTROSTATIC SENSITIVE DEVICES

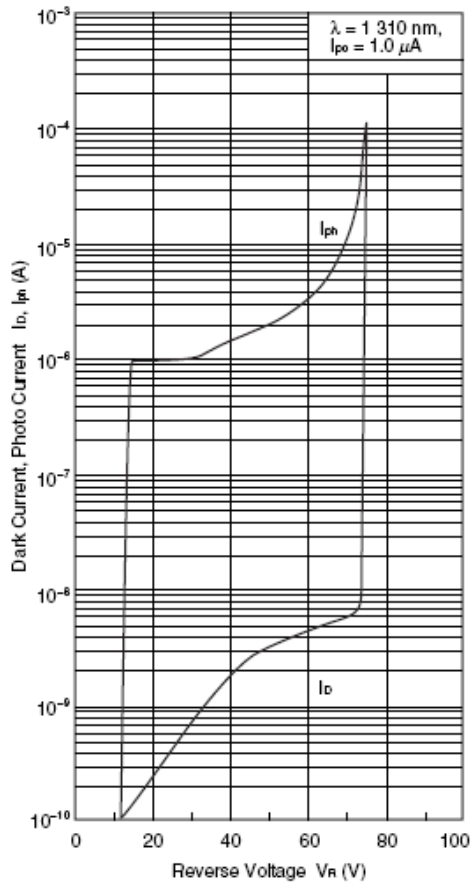
WAVELENGTH DEPENDENCE OF QUANTUM EFFICIENCY



MULTIPLICATION FACTOR vs. REVERSE VOLTAGE



DARK CURRENT AND PHOTO CURRENT vs. REVERSE VOLTAGE



DARK CURRENT vs. REVERSE VOLTAGE

