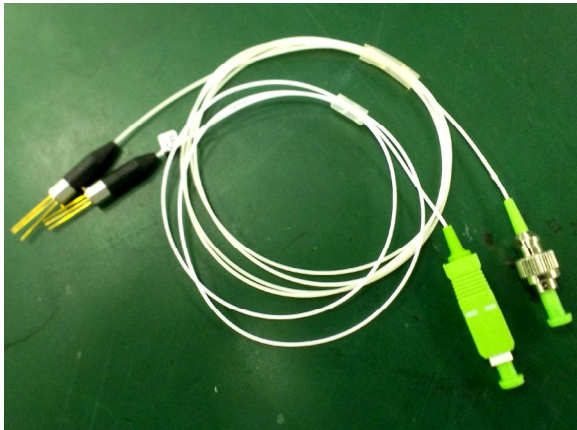


# InGaAs 50 $\mu$ m APD Module With Fiber

**Model: AA-I0917P0050XX-XX-X**



## Features:

- Wide dynamic range
- High responsibility
- Low dark current
- Low Return Loss

## Applications :

- Low cost OTDR
- Optical fiber sensor

## Product Specifications:

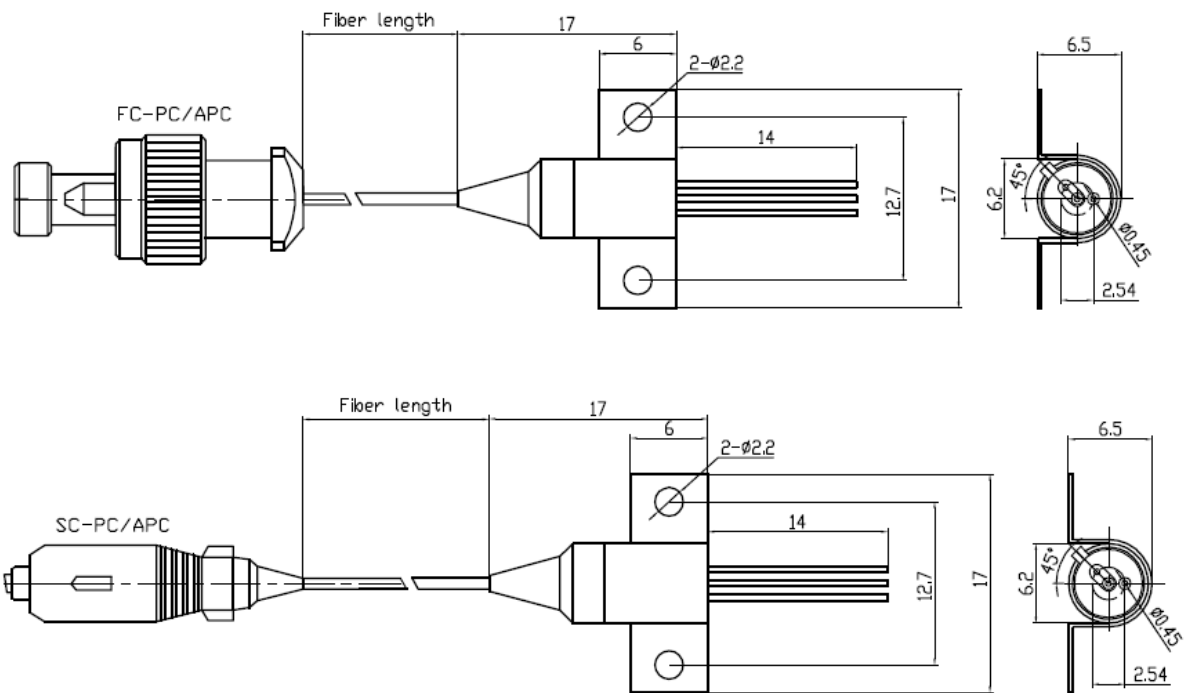
Absolute Maximum Ratings:

Parameter	Symbol	Unit	Min	Max	Note
Forward Current	$I_f$	mA	0	5	
Reverse Current	$I_r$	mA	0	5	
Storage Temperature	$T_s$	$^{\circ}$ C	-40	100	
Operating Temperature	$T_{op}$	$^{\circ}$ C	-40	85	
Solder Reflow Temperature		$^{\circ}$ C		260	10 seconds max

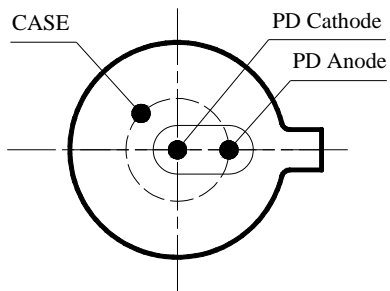
Electro-Optical Characteristics( $T_c=+25^{\circ}$ C):

Parameter	Symbol	Unit	Min	Typ	Max	Test Condition
Photosensitive Surface Diameter	$\phi$	$\mu$ m	—	50	—	
Response wavelength range	$\lambda$	nm	900	—	1700	
Responsibility	$R_e$	A/W	0.8	0.85	—	$\lambda = 1310\text{nm}$ , $M=1, P_{in}=100 \mu$ w
Breakdown Voltage	$V_{br}$	V	38	45	54	$I_d=10 \mu$ A
Dark current	$I_d$	nA	—	—	10	$V=V_{br}-3$
-3dBm Bandwidth	BW	GHz	2.5	—	—	$R_L= 50 \Omega$
Capacitance	$C_t$	PF	—	—	0.5	$M=10, f=1\text{MHz}$ ,

**Outline Drawings (in mm):**

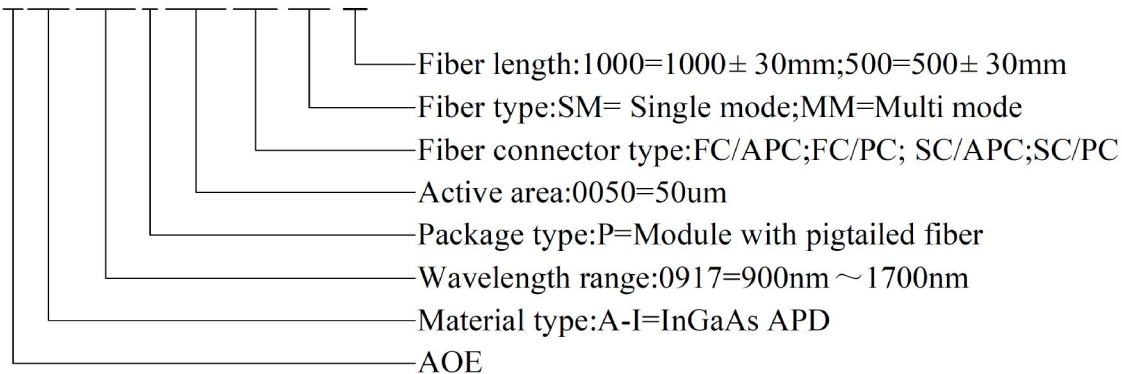


**PIN Assignment (Bottom View) :**



## Ordering Information:

**AA-I0917P0050XX-XX-X**



### Note:

- 1.Fiber core diameter&Numerical aperture:SM= 9μm/125μm 0.22NA, MM=62.5μm/125μm 0.22NA;
- 2.Recommended fiber length:1000mm for FC connector,500mm for SC connector.

## Precaution:

- (1) The modules should be handled in the same manner as ordinary semiconductor device to prevent the electro-static damages. For safety keeping and carrying, the modules should be packaged with ESD proof material. To assemble the modules on PCB, the workbench, the soldering iron and the human body should be grounded.
- (2) Please pay special attention to the atmosphere condition because the dew on the module may cause some electrical damages.
- (3) Under such a strong vibration environment as in automobile, the performance and reliability are not guaranteed.
- (4) Please clean the surface of optical fiber before working.
- (5) The minimum curvature radius of the fiber is 15mm.