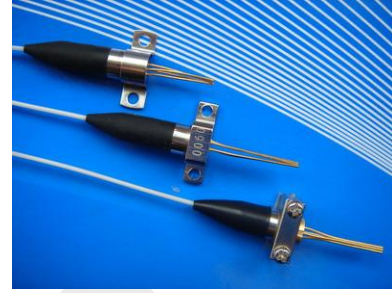


Long Wavelength PIN PD with Pigtail for Wide Frequency-range Application

OSMPDP-20XXXXXX



Features:

- ◆ Low Return Loss
- ◆ Low Dark Current
- ◆ Quick Pulse Response
- ◆ Suitable for CATV Application
- ◆ High Responsibility and High Linearity
- ◆ High Reliability and Long Operation Life
- ◆ RoHS Compliant Products Available

Applications:

- ◆ Optical Receiver
- ◆ Test Equipments

General:

OSMPDP-20XXXXXX Series are InGaAs/InP PIN photodiode modules designed for fiber optic communication systems. These modules are with pigtail, and have high responsibility, high speed and low dark current.

A photodiode is mounted into a low capacitance coaxial package integrated with a single mode fiber pigtail.

Ordering Information: (Standard version ^{*Note1})

Part No.	Wavelength (nm)	Explore Area (um)	Bandwidth (GHz)	Package	Pin Type
OSMPDP-2020AFAM	1310~1550	75	2	A	M
OSMPDP-2020EFAM	1310~1550	75	2	E	M

*Note1: For more ordering information, please refer the nomenclature and contact OSM sales.

Absolute Maximum Ratings:

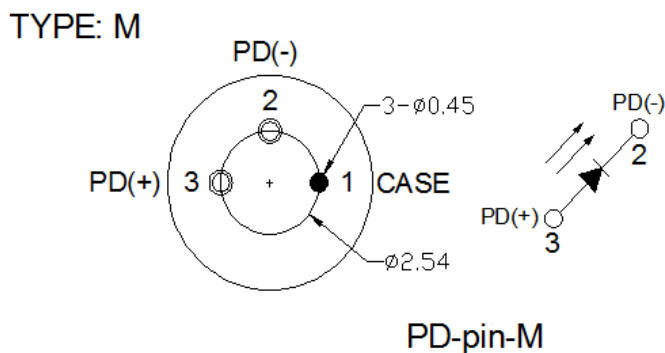
Parameter	Symbol	Min.	Max.	Unit
Storage Temperature	T_{ST}	-40	100	$^{\circ}C$
Operating Temperature	T_{OP}	-40	85	$^{\circ}C$
Reverse Voltage	VR	---	20	V
Saturation Input Power	P_{IN}	---	10	dBm
Soldering Temperature / Time	Ts/t	---	260/10	$^{\circ}C/s$

Electrical and Optical Characteristics:

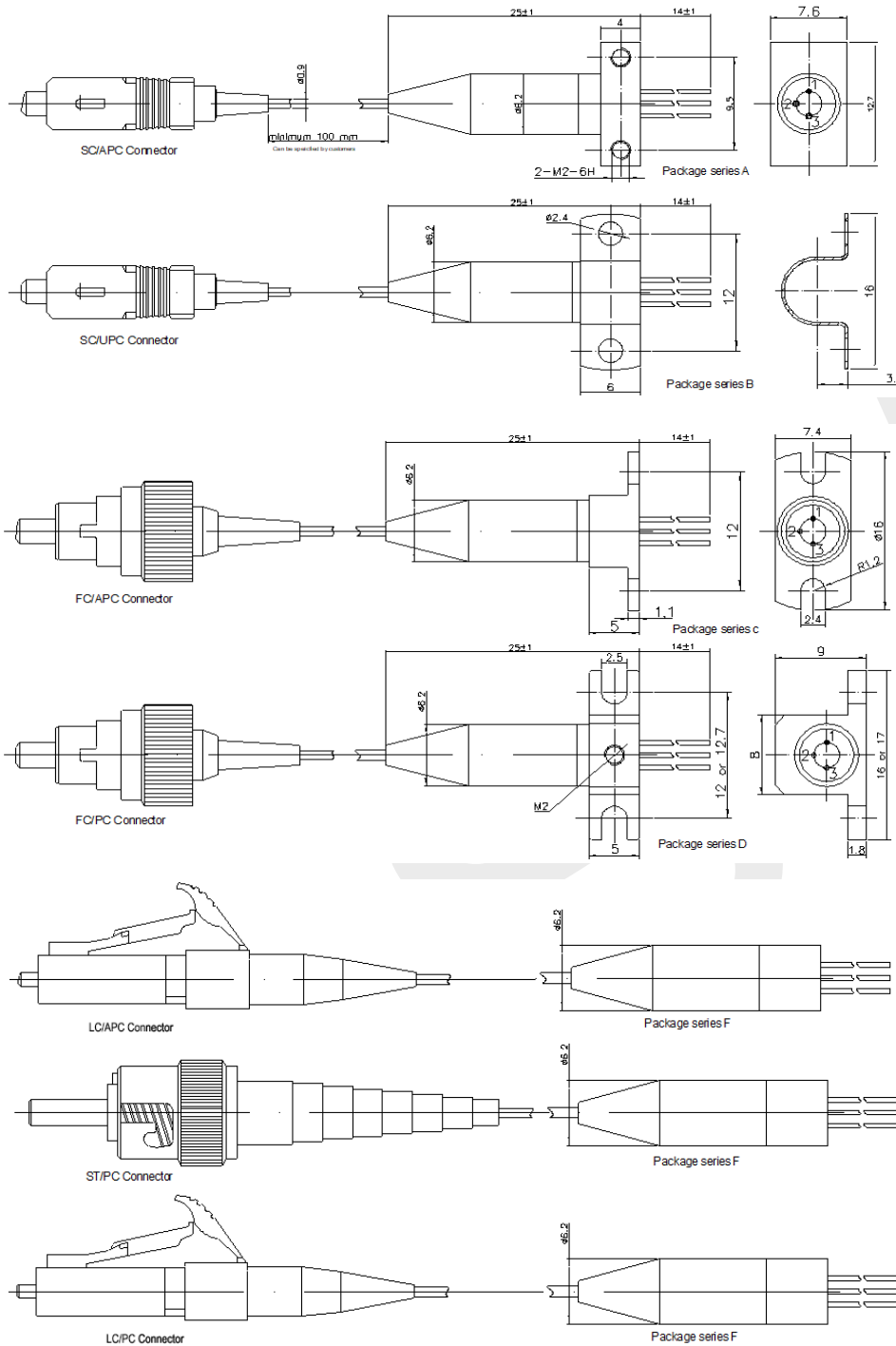
($V_r=5V$, $T_c=+25^{\circ}C$, unless otherwise noted.)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Detection Wavelength Range	λ	---	1100	---	1650	nm
Active Diameter	DA	---	---	75	---	μm
Responsivity	R	VR=-5V@1310nm	0.80	0.85	---	A/W
		VR=-5V@1550nm	0.85	0.90	---	A/W
Return Loss	RL	-	---	---	-50	dB
Dark Current	I_d	VR = 5V	---	0.15	1	nA
Capacitance	C_p	VR = 5V	---	0.6	0.7	pF
Bandwidth	BW	VR=5V	1.5	---	---	GHz
IMD2	CSO	$\lambda=1310nm$	---	-75	-70	dBc

Pin Assignment:



Pigtail Package Dimension: *Note2、3、4



*Note2: PIN direction and laser mark can be customized. Pigtail is standard SM fiber; the length also can be customized.

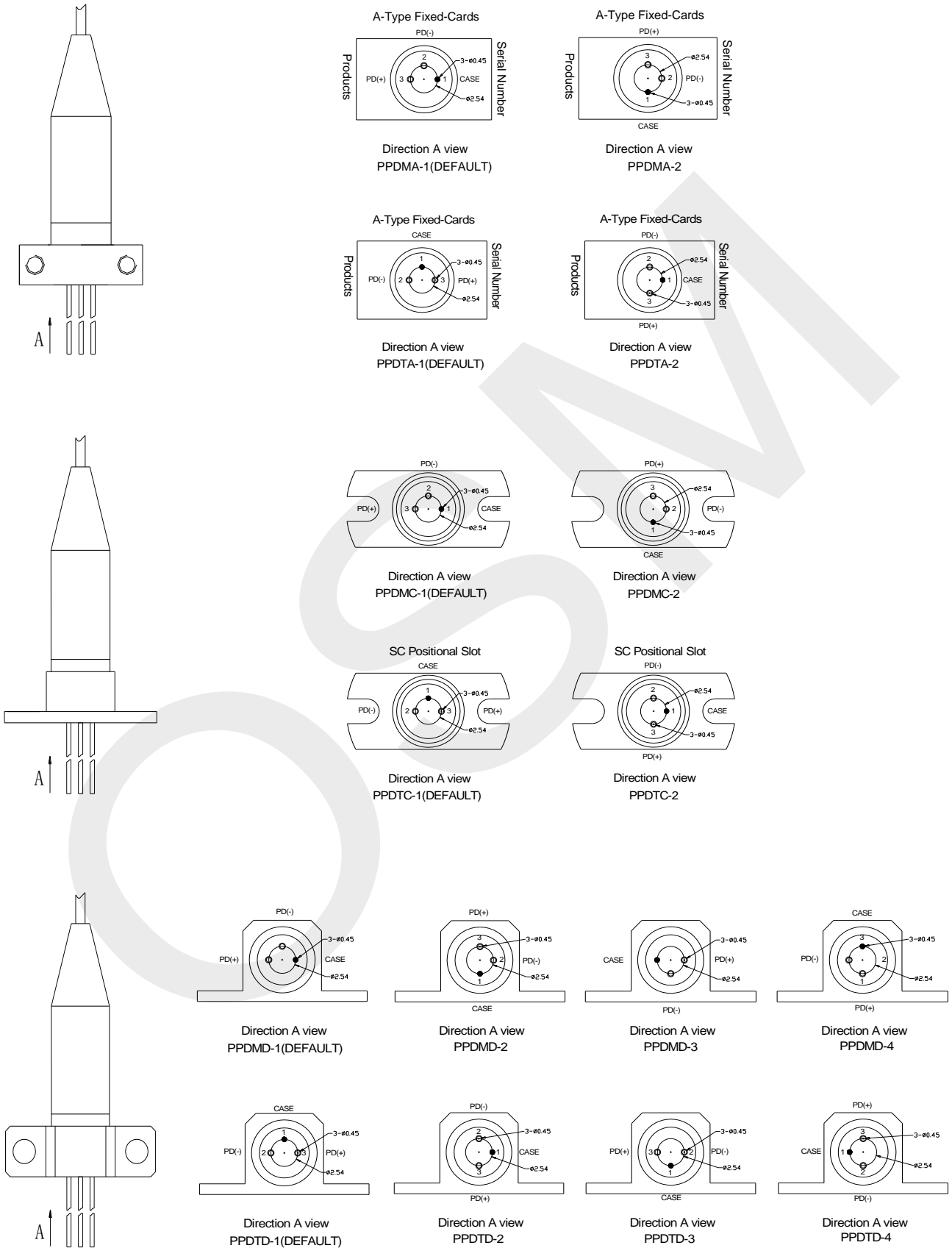
*Note3: For the package series D, the clamping rings dimensions (A) and drill size (B) are can be selected. The following types can be available. Please designate the detailed type while ordering the package series D.

Fixed card type	A(mm)	B(mm)
D	16	12
D-S	17	12.7

*Note4: For the package series B, the fix card is fixed by customer self. For the detailed information of fix card of

A, C, D package series, please refers the following graphs.

The Direction of Fix Card:



Nomenclature:

OSMPDP —

A B C D E F G H I J

A	Wavelength	20=1100~1650nm						
B	Explore Area	2=75μm						
C	Bandwidth	0≤2GHz						
D	Package Series	A	B	C	D	E	F	
E	Connector	F=FC/PC		S=SC/PC		T=ST/PC		SA=SC/APC
		FA=FC/APC		L=LC/PC		LA=LC/APC		N=None
F	Pin Type	M=PD-pin-M						
G	Pass Band Wavelength	Blank=1310/1550nm		3=1310nm		5=1550nm		
H	Fiber Type	Blank=SM						
I	Fiber Diameter	BLANK=0.9mm			2=2.0mm		3=3.0mm	
J	Fiber Length	BLANK=100cm			XXX=000			

Precaution:

- (1) The modules should be handled in the same manner as ordinary semiconductor devices to prevent the electro-static damages. For safe 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.

Notice:

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