CORNERSTONE STANDARD COMPONENTS LIBRARY

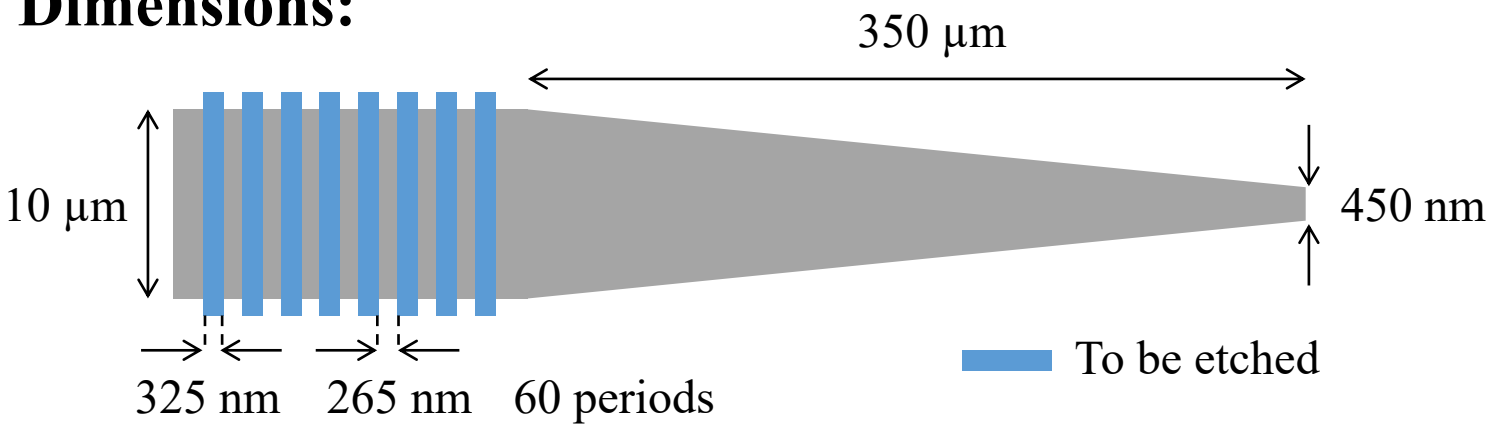
(On SOI Platforms)

- **Wavelength: 1550 nm**
- **Platform: 340 nm SOI**

SOI340nm_1550nm_TE_STRIP_Grating_Coupler

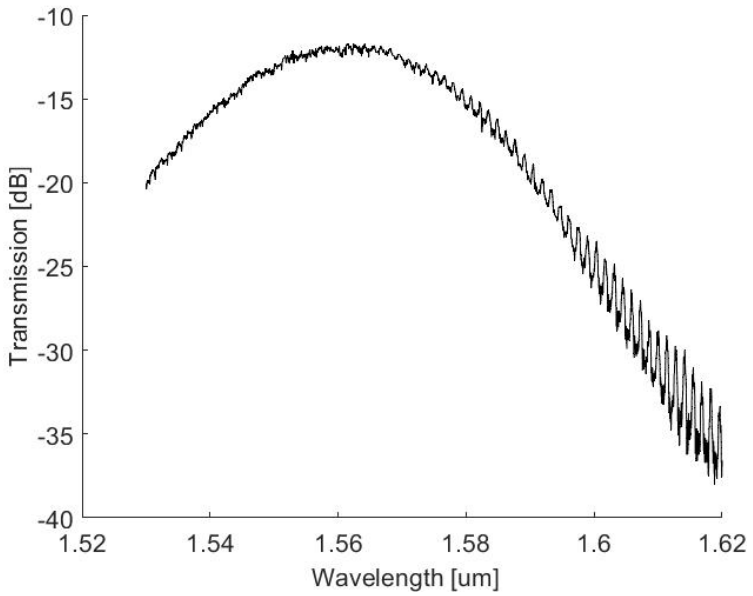
Platform:	340 nm SOI (2 um BOX layer)
Wavelength:	1550 nm
Etching depth:	140 nm (Grating etch depth)
Polarization:	TE
Cell name in GDS lib:	SOI340nm_1550nm_TE_STRIP_Grating_Coupler

Dimensions:



Fiber coupling angle: 10 degree

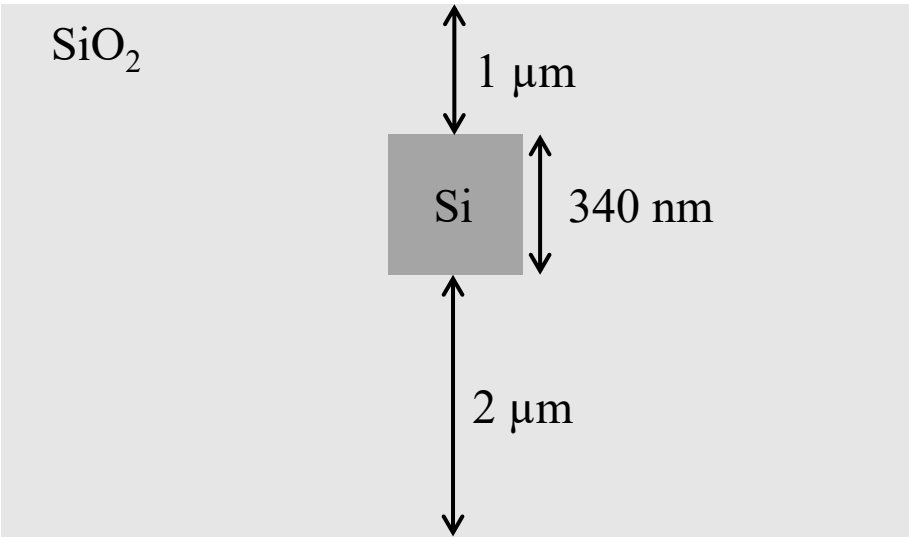
Measured transmission spectrum



Summarized performance:

- Coupling efficiency: 5-7 dB
- 1 dB bandwidth: > 35 nm
- Centre wavelength: 1550-1570 nm

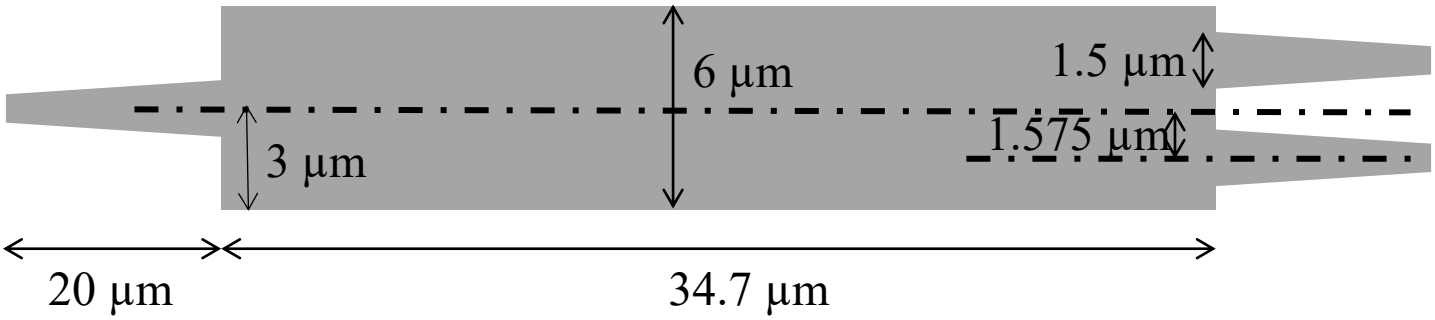
- Wavelength: 1550 nm
- Platform: 340 nm SOI
- **STRIP**



SOI340nm_1550nm_TE_STRIP_2x1_MMI

Platform:	340 nm SOI (2 um BOX layer)
Wavelength:	1550 nm
Etching depth:	340 nm (Strip design)
Polarization:	TE
Cell name in GDS lib:	SOI340nm_1550nm_TE_STRIP_2x1_MMI

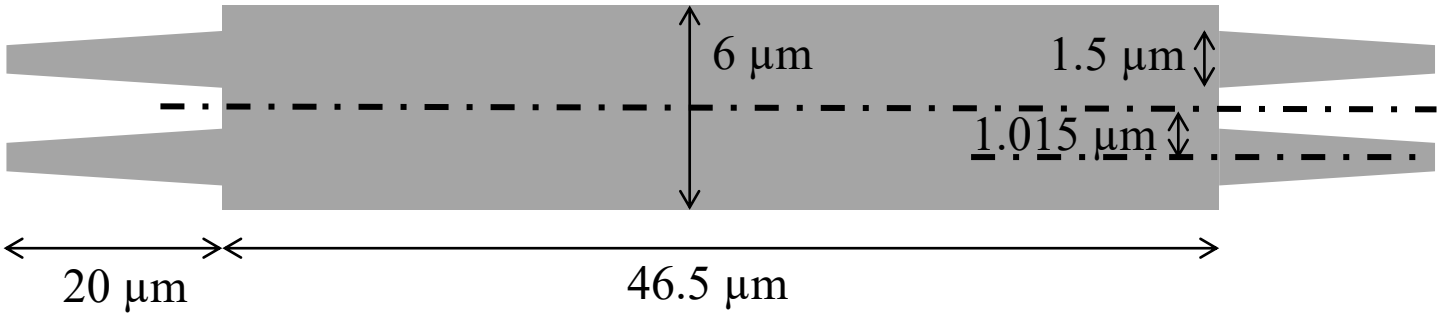
Dimensions:



SOI340nm_1550nm_TE_STRIP_2x2_MMI

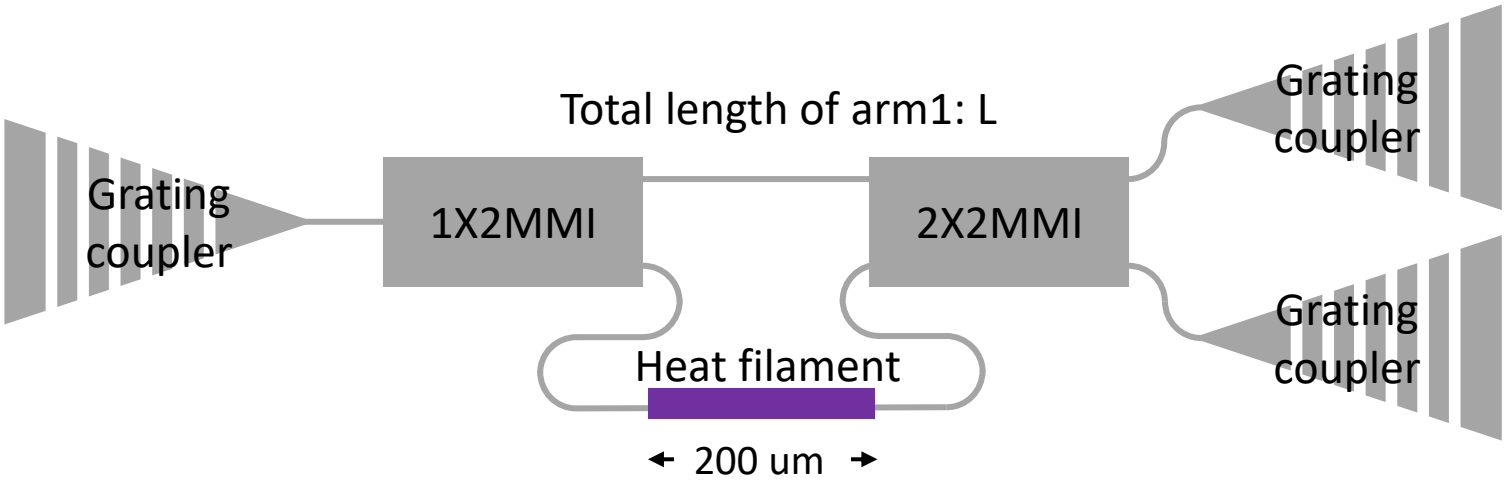
Platform:	340 nm SOI (2 um BOX layer)
Wavelength:	1550 nm
Etching depth:	340 nm (Strip design)
Polarization:	TE
Cell name in GDS lib:	SOI340nm_1550nm_TE_STRIP_2x2_MMI

Dimensions:



SOI340nm_1550nm_TE_STRIP_MZI

Platform:	340 nm SOI (2 um BOX layer)
Wavelength:	1550 nm
Etching depth:	140 nm (Grating) & 340 nm (Strip design)
Polarization:	TE
Cell name in GDS lib:	SOI340nm_1550nm_TE_STRIP_MZI



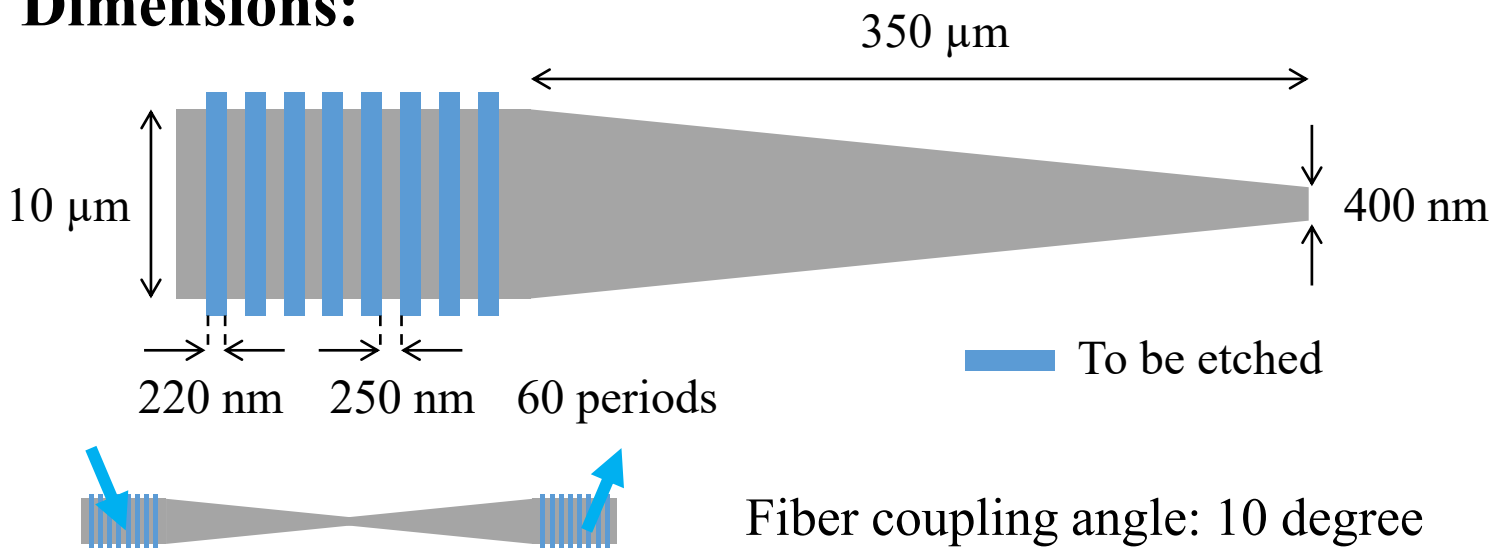
Total length of arm2: L+ΔL (160 um)

- **Wavelength: 1310 nm**
- **Platform: 340 nm SOI**

SOI340nm_1310nm_TE_STRIP_Grating_Coupler

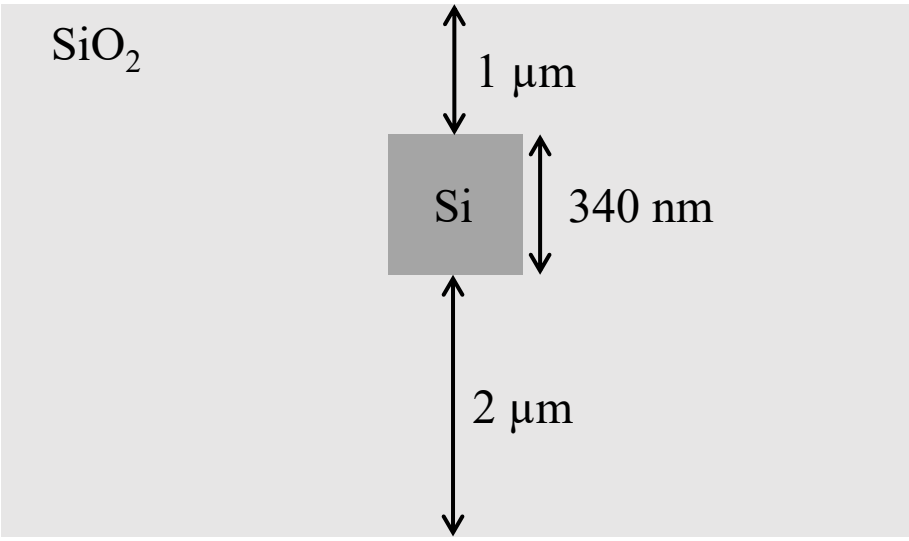
Platform:	340 nm SOI (2 um BOX layer)
Wavelength:	1310 nm
Etching depth:	140 nm (Grating etch depth)
Polarization:	TE
Cell name in GDS lib:	SOI340nm_1310nm_TE_STRIP_Grating_Coupler

Dimensions:



Fiber coupling angle: 10 degree

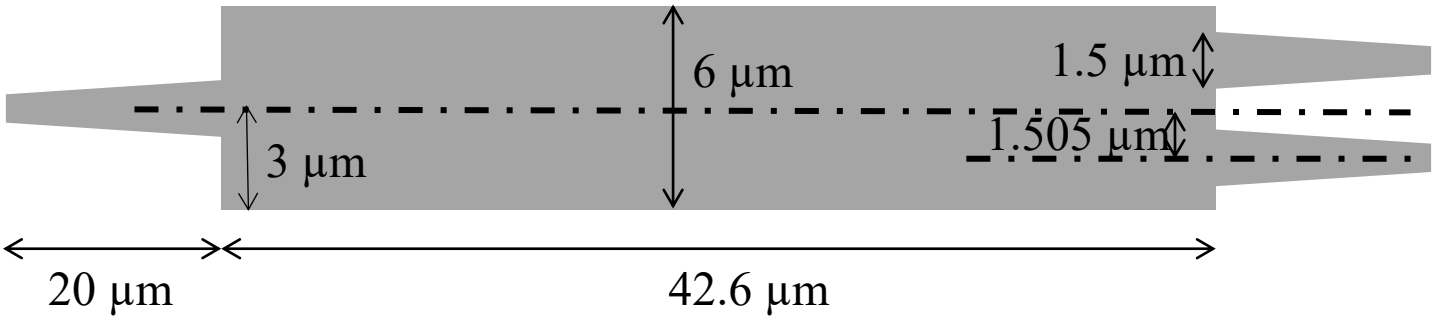
- Wavelength: 1310 nm
- Platform: 340 nm SOI
- **STRIP**



SOI340nm_1310nm_TE_STRIP_2x1_MMI

Platform:	340 nm SOI (2 um BOX layer)
Wavelength:	1310 nm
Etching depth:	340 nm (Strip design)
Polarization:	TE
Cell name in GDS lib:	SOI340nm_1310nm_TE_STRIP_2x1_MMI

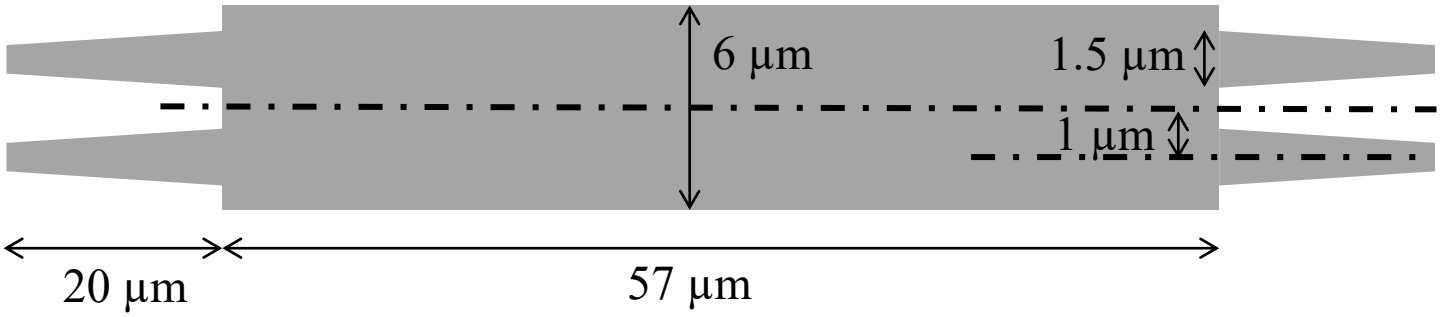
Dimensions:



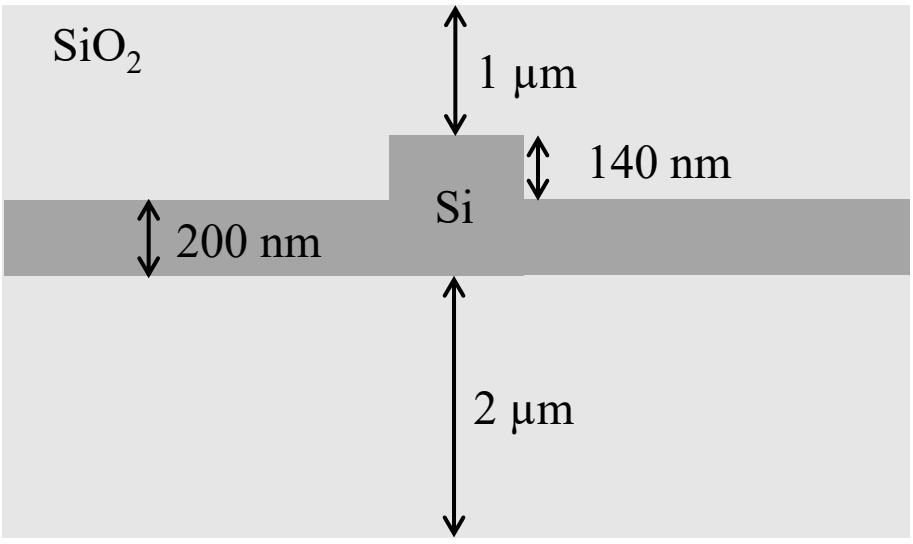
SOI340nm_1310nm_TE_STRIP_2x2_MMI

Platform:	340 nm SOI (2 um BOX layer)
Wavelength:	1310 nm
Etching depth:	340 nm (Strip design)
Polarization:	TE
Cell name in GDS lib:	SOI340nm_1310nm_TE_STRIP_2x2_MMI

Dimensions:

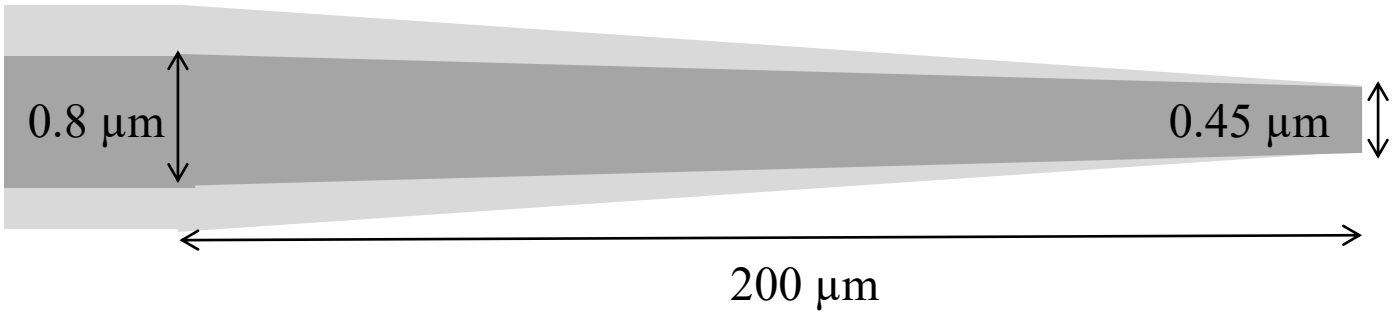


- Wavelength: 1550 nm
- Platform: 340 nm SOI
- **RIB**



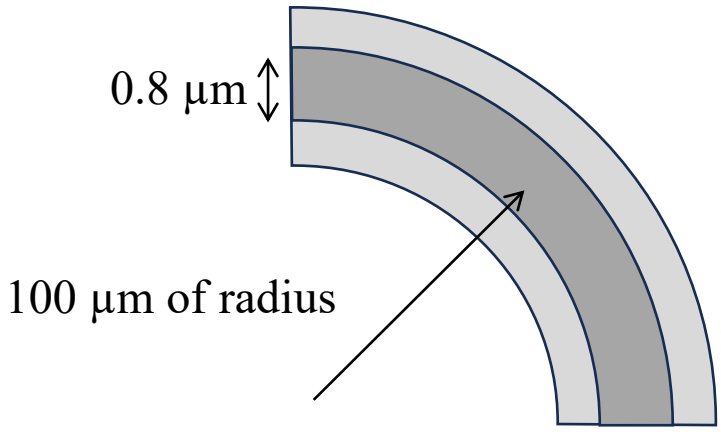
SOI340nm_1550nm_TE_RIB_to_STRIP

Platform:	340 nm SOI (2 um BOX layer)
Wavelength:	1550 nm
Etching depth:	140 nm and 340 nm
Polarization:	TE
Cell name in GDS lib:	SOI340nm_1550nm_TE_RIB_to_STRIP



SOI340nm_1550nm_TE_RIB_90_Degree_Bend

Platform:	340 nm SOI (2 um BOX layer)
Wavelength:	1550 nm
Etching depth:	140 nm
Polarization:	TE
Cell name in GDS lib:	SOI340nm_1550nm_TE_RIB_90_Degree_Bend



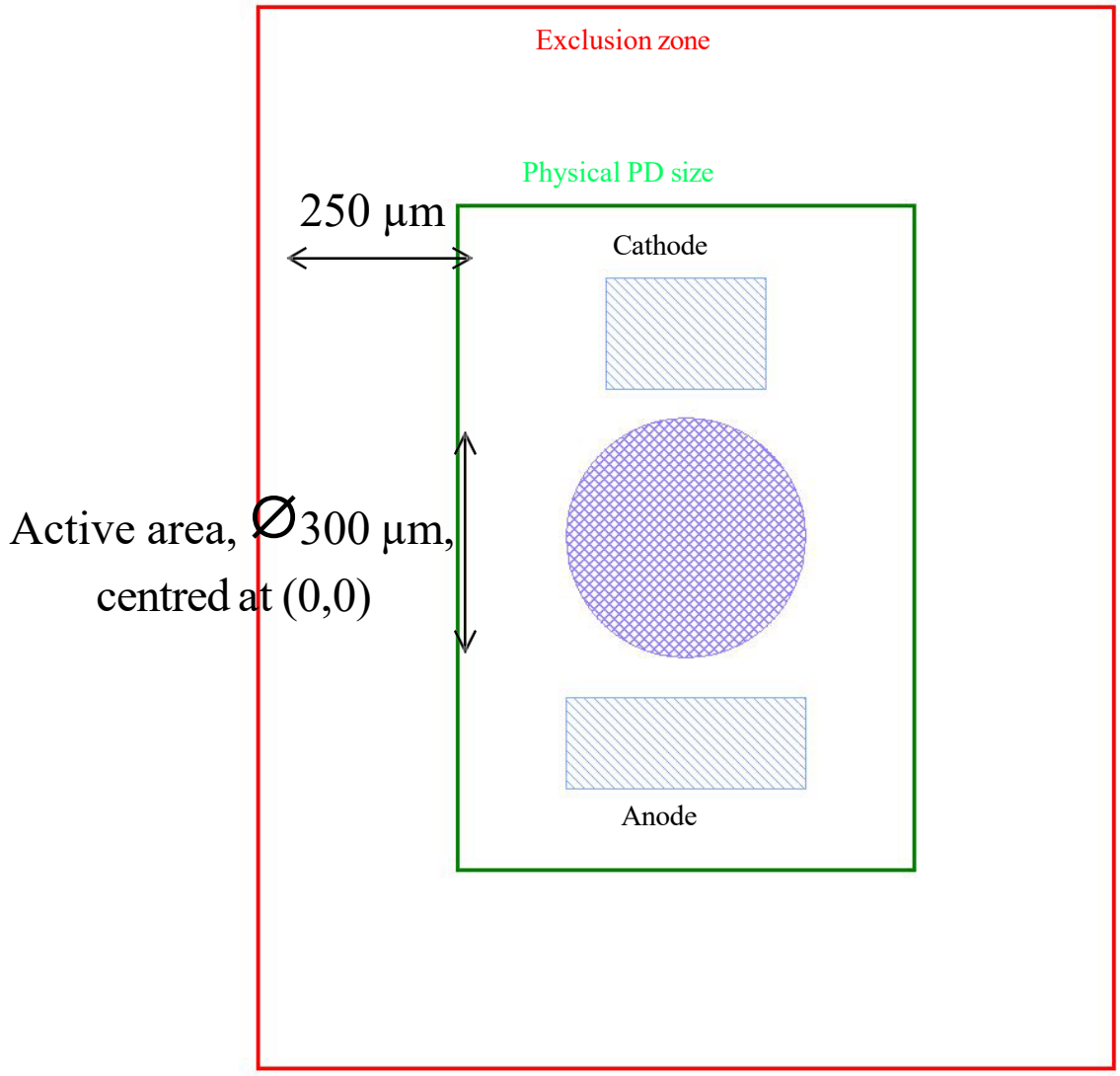
- Wavelength: Broadband
- Platform: 340 nm SOI
- **SOI_PD**
- OSI Optoelectronics

(FCI-InGaAs-300B1)

SOI340nm_PD_FCI300B1_Plain

Platform:	340 nm SOI (2 um BOX layer)
Wavelength:	900-1700 nm
Producer	OSI Optoelectronics
Model number	FCI300B1
Cell name in GDS lib:	SOI340_PD_FCI300B1_Plain
Responsivity	>0.5 A/W @ λ=1550nm based on GC performance

Dimensions:



SOI340nm_PD_FCI300B1_Integrated

Platform:	340 nm SOI (2 um BOX layer)
Wavelength:	900-1700 nm
Producer	OSI Optoelectronics
Model number	FCI300B1
Cell name in GDS lib:	SOI340_PD_FCI300B1_Integrated
Responsivity	>0.5 A/W @ λ=1550nm based on GC performance

Dimensions: