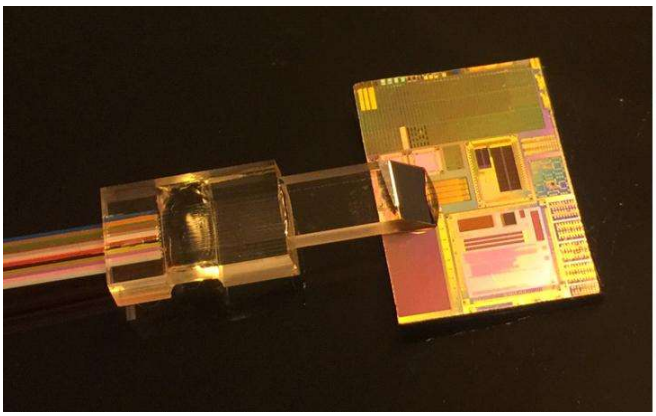
WAFT Series

The Silicon Chip-to-Fiber Interface Solution

DESCRIPTION



The Top-Coupling Waveguide Array to Fiber Transposer (TC-WAFT) is the must-have PIC-to-fiber **solution for a low-footprint, low-profile injection into grating couplers**. It is perfectly suitable for **PIC packaging** and **wafer-level testing**.

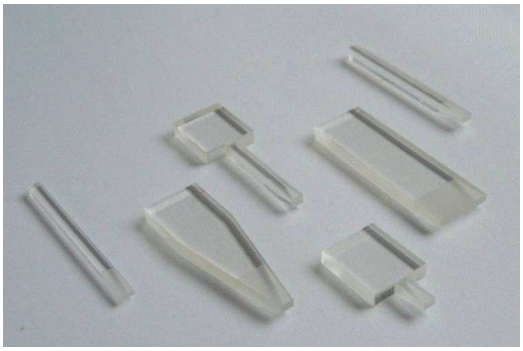
Thanks to its **ioNext platform** (Photonics Integrated Circuits on glass), TEEM offers a whole range of bare and pigtailed TC-WAFT products, with user-defined port number, output pitch and output mode size.

KEY FEATURES

Number of ports	< 32	[32 – 96]	[96 -256]
Max Insertion Loss * (dB)	0.7	0.9	1.1
Insertion Loss Uniformity * (dB)	< 0.2	< 0.3	< 0.3
Max Polarization Dependent Loss (dB)	0.1	0.2	0.2
Max Adjacent Crosstalk (dB)	-30	-30	-25
Output Mode Size @1550nm (µm @ 1/e²)	10		
Minimum Output Pitch (µm)	20		
Outputs Positioning Relative Accuracy (µm)	+/- 0.05		+/- 0.1
Polarization Extinction Ratio (dB)	> 25		
Operating wavelength (nm)	1200 - 1700		

OPTIONS

- Fibre connection
  - SM or PM fibres
  - FC, SC, ST, LC or MPO connectors
- Custom chip designs :
  - Variable output pitches
  - Additional optical functions (taps, splitters…)
- Custom chip dimensions and shaping



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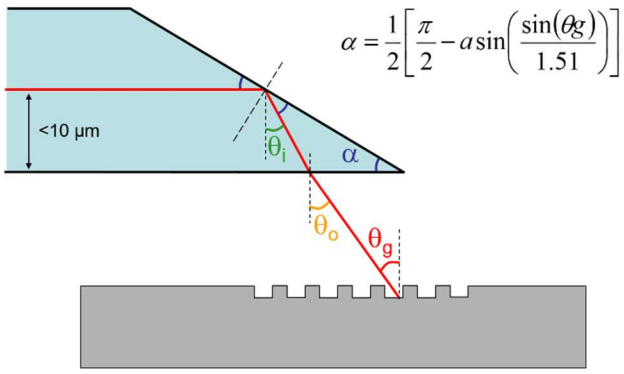
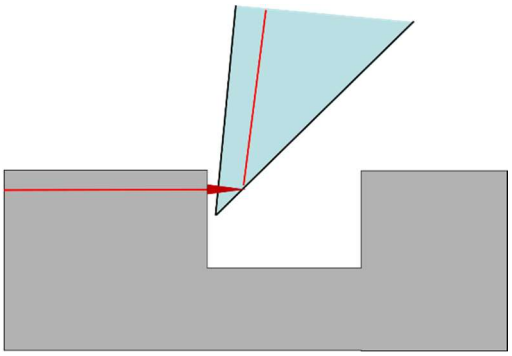
APPLICATIONS

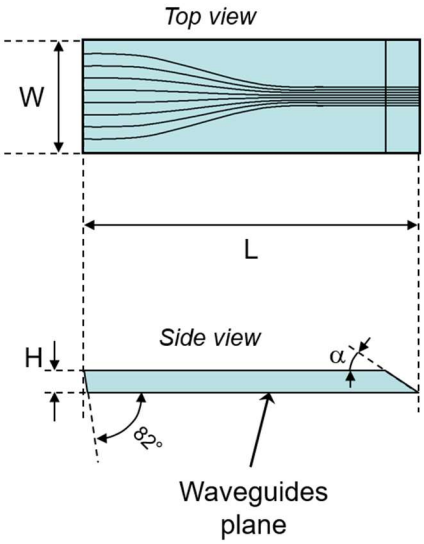
PIC packaging



Wafer-level testing

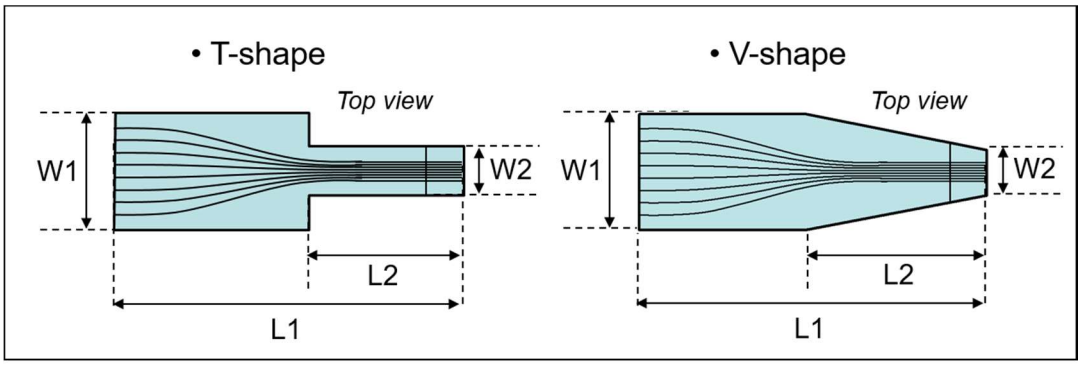


STANDARD TC-WAFT SHAPE



- W and L depend on the :
  - -number of ports
  - -input and output pitch
- H = 1.5 ± 0.05 mm
- α = 39°, 40°, 41° or 45° ± 0.5°

SHAPING OPTIONS



PART NUMBER DESCRIPTION

P/N : TC-WAFT-NC-IP-OP-S-CA-FO-FT-FA-CT		
NC	Number of Channels	From 1 to 256
IP	Input Pitch	127 or 250 µm
OP	Output Pitch	Down to 20 µm
S	Shaping	0 : No shaping C : Custom
CA	Chip Angle	39°, 40°, 41°, 45° or Custom (CM)
FO	Fibering Option	0 : Bare chip F : Chip pigtailed with fiber array
FT	Fiber Type	SM : SMF28 PM : Panda PM1550 CM : Custom
FA	Fiber Arrangement	SF : Singulated fibers FR : Fiber ribbon
CT	Connector Type	FC, SC, LC, ST, MPO