



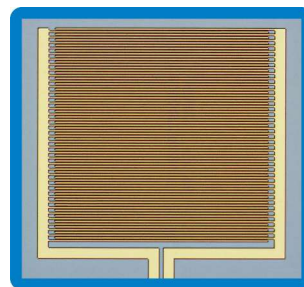
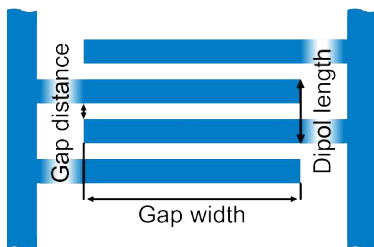
Interdigital Photoconductive Antenna

- Interdigital Photoconductive antenna with LT-GaAs absorber layer
- Developed as **Terahertz emitter** and **receiver** antenna
- Designed for laser wavelength 780 nm
- THz power of up to 280 μ W (avg.)
- Bandwidth of up to 5 THz (typ.)

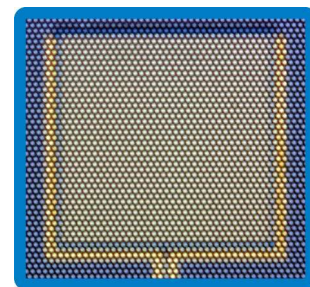


Dimensions

iPCA	Specification	
iPCA-21-05-300	Recom. optical power	300 mW
	Dipol length	21 μ m
	Gap distance	5 μ m
	Gap width	300 μ m
	Active area	300 x 300 μm
iPCA-21-05-1000	Recom. optical power	1 W
	Dipol length	21 μ m
	Gap distance	5 μ m
	Gap width	1000 μ m
	Active area	1000 x 1000 μm
iPCA-21-05-3000	Recom. optical power	3 W
	Dipol length	21 μ m
	Gap distance	5 μ m
	Gap width	3000 μ m
	Active area	3000 x 3000 μm



Metallic structure



Metallic structure with aligned micro lens array

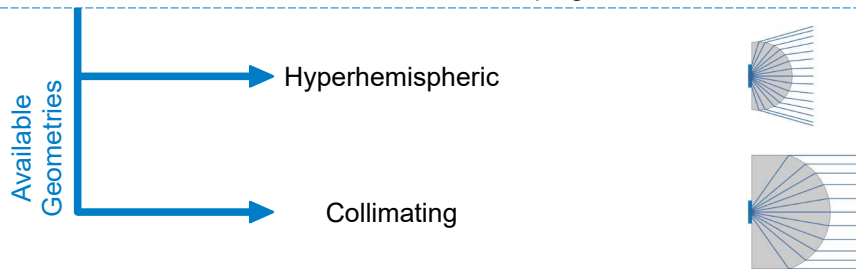


Mounting Options

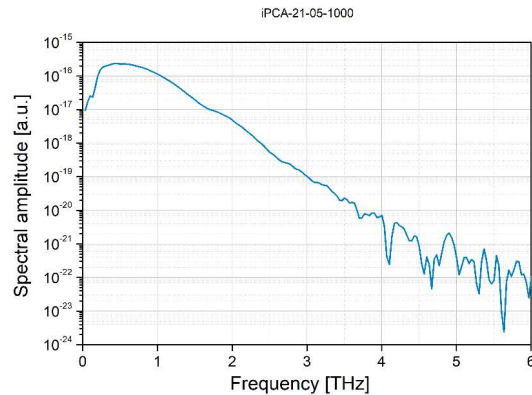
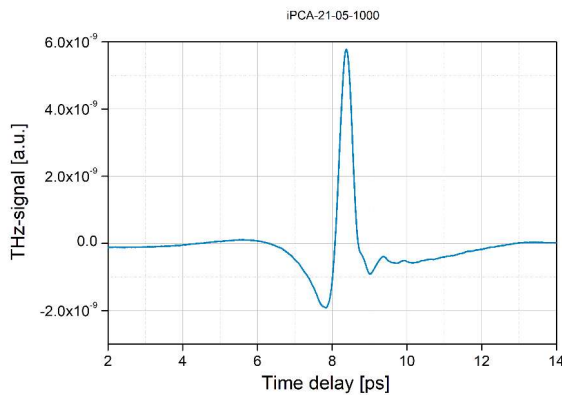


Mounted on a Silicon Lens

- For free space laser excitation
- Aluminium mount (\varnothing 25.4 mm)
- 1 m coaxial cable with BNC plug



THz Signal & Spectrum



Measured by Michael Williams of the Schmittenmaer Research Group
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