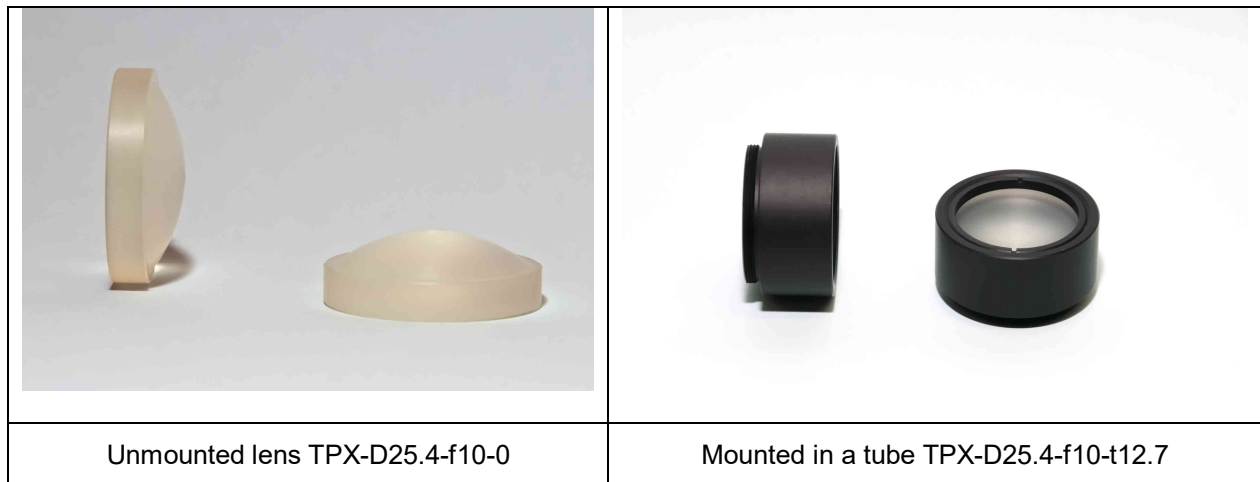


Data sheet TPX-D25.4-f10

Plano-convex aspheric TPX lens with diameter 25.4 mm and focal length 10 mm for THz application



Description

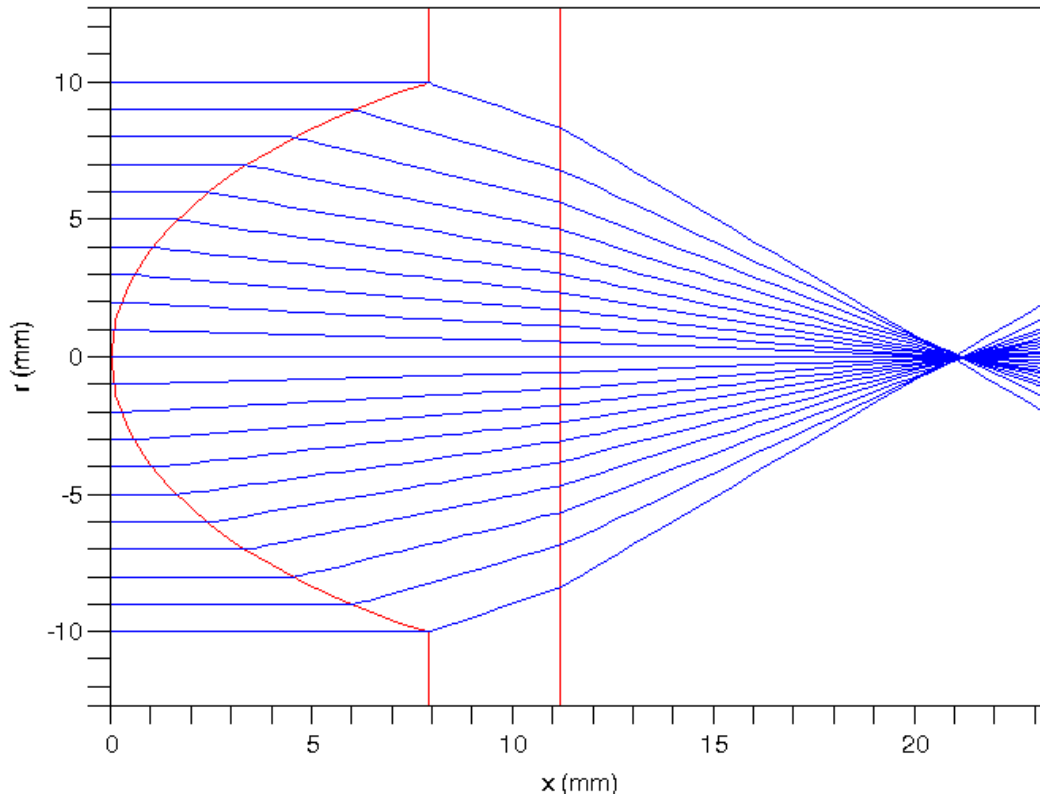
The TPX-D25.4-f10 is a plano-convex aspheric TPX (Polymethylpentene) lens for THz waves. It can be used to focus a collimated THz beam.

Lens parameters:	material	TPX (Polymethylpentene)
	refractive index n	1.45 @ 1 THz
	absorption coeff. α	0.3 cm ⁻¹
	focal length	10 mm (distance flat surface – focus)
	outer lens diameter	25.4 mm
	free aperture diameter	20 mm
	maximum lens thickness	11.2 mm
	edge lens thickness	3.3 mm
	aperture angle α	39.9 °
	numerical aperture NA	0.64



Airy disc diameter	$\nu = 300$ GHz	810 μm
	$\nu = 1$ THz	243 μm
	$\nu = 3$ THz	81 μm

Lens tube	outer diameter	30.5 mm
	length	12.7 mm (1/2") or 25,4 mm (1")

TPX lens 25.4 mm diameter, 10 mm focal length



Order information

<i>Part number</i>	<i>Description</i>	<i>Photo</i>
TPX-D25.4-f10-0	Unmounted TPX lens with diameter $D = 25.4$ mm and focal length $f = 10$ mm	
TPX-D25.4-f10-t12.7	Mounted TPX lens with diameter $D = 25.4$ mm and focal length $f = 10$ mm, tube length 12.7 mm	
TPX-D25.4-f10-t25.4	Mounted TPX lens with diameter $D = 25.4$ mm and focal length $f = 10$ mm, tube length 25.4 mm	