

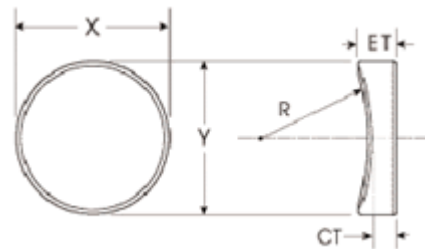
GERMANIUM(Ge) PLANO-CONCAVE LENSES

Germanium plano-concave lenses have a very low absorption in the infra-red. Negative focusing Germanium lenses are perfect for thermal imaging and Carbon Dioxide laser focusing applications.

We supply uncoated but a range of anti-reflection coatings can be applied as well.

Standard Specifications:

Optical Material:	High quality single-crystal Germanium
Diameter Tolerance:	+0.0, -0.15mm
Design Wavelength:	10.6um
Design Index:	4.0028 at 10.6um
Paraxial Focal Length:	±2%
Centration:	3 arc minutes
Clear Aperture:	>85%
Surface Quality:	60-40 scratch and dig
Wavefront Distortion:	lambda/2 at 632.8nm
Bevel:	<0.25mm X 45°
Coating:	available upon request



Standard Germanium Plano-Concave Lenses:

Dia(mm)	f(mm)	R1(mm)	tc(mm)	te(mm)	Product Number
25.40	-38.10	114.40	3.7	3.0	UQT-PLCAG0501
25.40	-50.80	152.54	3.5	3.0	UQT-PLCAG0502
25.40	-63.50	190.68	3.4	3.0	UQT-PLCAG0503
25.40	-76.20	228.81	3.3	3.0	UQT-PLCAG0504
28.00	-38.10	114.40	3.8	3.0	UQT-PLCAG0505
28.00	-50.80	152.54	3.6	3.0	UQT-PLCAG0506
28.00	-63.50	190.68	3.5	3.0	UQT-PLCAG0507
28.00	-127.0	381.35	3.3	3.0	UQT-PLCAG0508
38.10	-50.80	152.54	7.2	6.0	UQT-PLCAG0509
38.10	-63.50	190.68	6.9	6.0	UQT-PLCAG0510
38.10	-76.20	228.81	6.8	6.0	UQT-PLCAG0511
38.10	-127.0	381.35	6.5	6.0	UQT-PLCAG0512
38.10	-190.5	572.03	6.3	6.0	UQT-PLCAG0513

Please Contact [ultiQuest](#) for other dimensions in prototype and production quantities.

NOTES!

- ➔ Germanium is susceptible to thermal runaway, being non-transmissive at 200°C.
- ➔ Be sure to wear laser safety goggles when checking optical path and adjusting optical axis.

