IR optics from Germanium

We offer:
- raw material
- blanks and shapes for a requested form
- polished and coated optical elements

Countries of origin of the material are Belarus / Russia. Material is processed by VM-TIM

Main material properties:

Available types	monocrystalline for solar cells (dopant Sb) monocrystalline IR for otical components (dopant Sb) monocrystaline for special applications (dopants Sb, Ga, Au) polycrystalline zonerefined
Refraction index at 10.6µm (spectrum is available by request)	4.0032
Homogenity of refraction index	<= $2 \cdot 10^{-4}$
Internal transmission at 10.6µm (spectrum is available by request)	> 46% (thickness 10mm)
Orientation (for monocrystalline)	[111],[100],[110] +/-2^{o}
Conductivity	n-type, p-type for special applications
Resistivity	0.05-0.4 Ohm·cm for solar cells 5-40 Ohm·cm for optical components 0.01-45 Ohm·cm for special applications 45-55 Ohm·cm for polycrystalline
Density	5.323 g/cm^3
Melting temperature	937 ^{o}C
Boiling temperature	2,830 ^{o}C
Coefficient of linear thermal expansion	$6.1 \cdot 10^{-6}$ cm/^{o}C (at 25^{o}C)
Specific thermal capacity	309 J/(kg·^{o}C)
Possible diameter	up to 250 mm
Possible thickness	up to 400 mm

Extended list of properties is available by request
Prices are available by request: info@vm-tim.de

VM-TIM, Lutherstrasse 48, 07743 Jena, Germany
tel. +49 3641 384859, fax +49 3641 384860
info@vm-tim.de, www.vm-tim.de