GLOBAL OPTICS (UK) LTD

30 Brockley Road, Bournemouth Dorset, BH10 6JN. Tel: 01202 530609 Fax: 01202 547209

Email: globalopticsuk@btinternet.com
Website: www.globalopticsuk.co.uk

GALLIUM ARSENIDE

Used for lenses and beam splitters and provides an alternative to ZnSe in medium to high power CW CO2 laser systems. Gallium Arsenide is most useful in applications where toughness and durability are important. Its hardness and strength make it a good choice where dust or abrasive particles tend to build up on or bombard the optical surfaces. The material is non-hydroscopic , safe to use in laboratory and field conditions and is chemically stable except when in contact with strong acids.

Transmission Range	1 - 11.0 μ	
Crystal Structure	-	
Cleavage Plane	None	
Colour	Metalic lustre	
Density	5.32	
Melting Point (°)	1511	
Reflection Loss	45% (12µ) for 2 surfaces	
Solubility index	Insoluble	
Hardness (Knoop)	731kg/mm ²	
Thermal Conductivity (cal/cm sec°C)	55W (m K) 300K	
Thermal Expansion coefficient (/°C)	5.7x10 ⁻⁶ 1/K at 300K	

