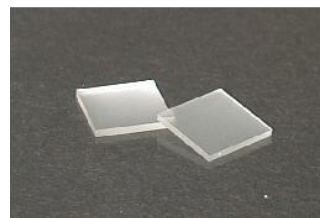


# MgO Substrates

## Magnesium Oxide (MgO) Substrates!

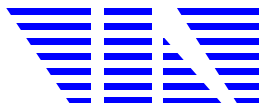
- ✚ Single crystal substrates
- ✚ Purity > 99.95%
- ✚ Epi-ready
- ✚ Excellent quality, free of any defect
- ✚ Surface finish 5-7Å, epi-side



### List of various MgO substrates available:

<b>&lt;100&gt;</b>			
Size	Polish	Size	Polish
10 x 10 x 0.5mm	One side	10 x 10 x 1.0mm	One side
10 x 10 x 0.5mm	Both sides	10 x 10 x 1.0mm	Both sides
0.5" x 0.5" x 0.5mm	One side	1.0" x 1.0" x 0.5mm	One side
0.5" x 0.5" x 0.5mm	Both sides	1.0" x 1.0" x 0.5mm	Both sides
1" dia x 0.5mm	One side	2" dia x 0.5mm	One side
1" dia x 0.5mm	Both sides	2" dia x 0.5mm	Both sides
<b>&lt;110&gt;</b>		<b>&lt;111&gt;</b>	
10 x 10 x 0.5mm	One side	10 x 10 x 0.5mm	One side
10 x 10 x 0.5mm	Both sides	10 x 10 x 0.5mm	Both sides
0.5" x 0.5" x 0.5mm	One side	0.5" x 0.5" x 0.5mm	One side
0.5" x 0.5" x 0.5mm	Both sides	0.5" x 0.5" x 0.5mm	Both sides

<b>Typical Properties</b>	
Growth Method	Special Arc Melting
Typical Impurity (ppm)	Ca ≤40, Al ≤15, Si ≤10, Fe ≤50, Cr ≤10, B ≤5, C ≤10
Melting Point	2852°C
Density	3.58 gm/cm <sup>3</sup>
Dielectric Constant	9.8
Optical Transmission	>90% @ 200~400nm and > 97% @ 500~1000 nm
Thermal Expansion	12.8 x 10 <sup>-6</sup> /°C



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