

High Quality ZnO Substrates

for wide band gap applications

TEW's ZnO substrates

High Crystallinity Bulk Single Crystal

High Purity

Flat Surface

Low Defects

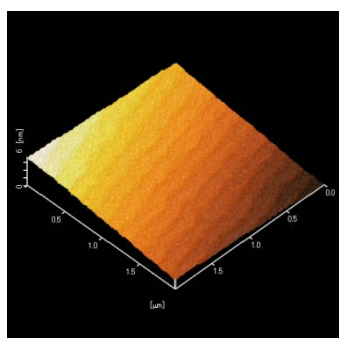


Photograph of 2-inch ZnO substrate

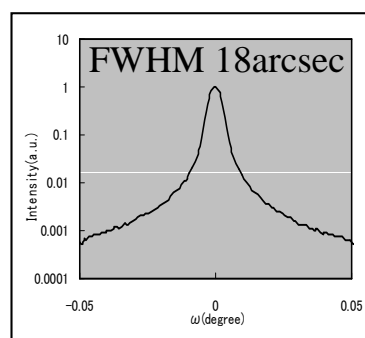
ZnO Product Specifications

Dimensions	$\phi 50.8 \pm 0.5$ mm or $10 \times 10 \pm 0.3$ mm
Orientation	Thickness: 0.3 ~ 0.5 mm (tolerance $\pm 10\%$) c-cut plate (0001)(000-1), m-cut plate(10-10) (tolerance ± 0.5 degrees) ※off-angle: within 0.5 degrees (c-plate only)
Surface treatment	both faces polished (CMP)
Surface roughness	RMS 0.5nm (typical)
Resistivity	$10^{-1} \sim 10^4 \Omega \cdot \text{cm}$
Conductivity	n-type
Purity	<99.998%
Growth method	Hydrothermal method

Typical Data



AFM image (Zn-face)



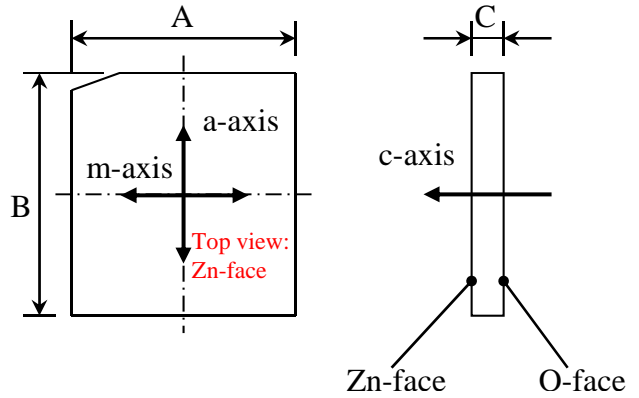
X-ray Rocking Curve (0002)

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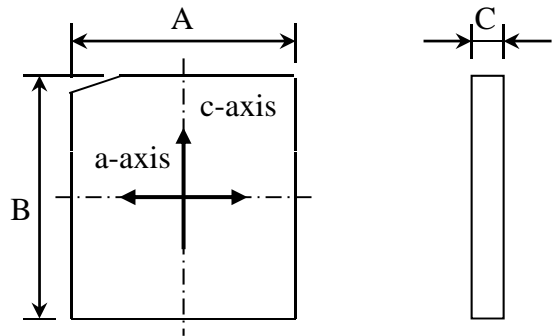
c-cut plate (polar face)

	A	B	C
①	10	10	0.5
②	Φ2-inch		0.5



m-cut plate (non-polar face)

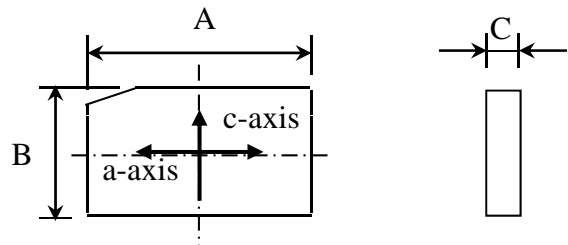
	A	B	C
①	10	10	0.5



Semi-polar faces

r(10-11) or R(10-12)

	A	B	C
①	10	5	0.5



REFERENCE



TEW AMERICA, INC.,

<http://www.tewamerica.com>

Specifications subject to change without notice. Jan / 2011

The ordering number will be obtained separately by customer's requirement.