

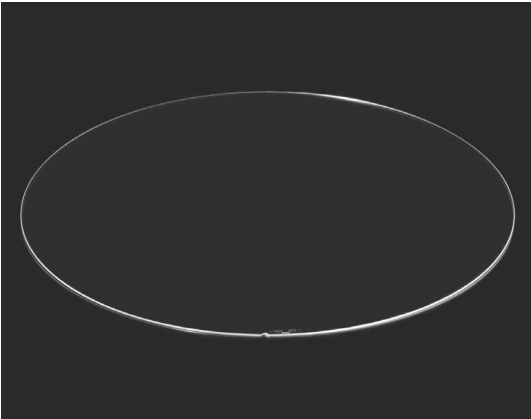
# Glass Wafer for Supporting Semiconductors

Various CTE\*<sup>1</sup> glass wafers are available as substrates for supporting semiconductors.

## Features

- Various CTE glass types are available.
- TTV\*<sup>2</sup> < 1μm (φ12 inches)
- T7 code is available.

\*<sup>1</sup> Coefficient of thermal expansion  
\*<sup>2</sup> Total thickness variation



## Properties

| Properties / Glass Code  |            |        | ABC-G | A58  | A66S | A69  | A75  | A91S  |
|--------------------------|------------|--------|-------|------|------|------|------|-------|
| CTE                      | 20-220°C   | ppm/°C | 3.6   | 5.6  | 6.3  | 6.6  | 7.2  | 8.7   |
|                          | 20-260°C   | ppm/°C | 3.7   | 5.7  | 6.4  | 6.7  | 7.3  | 8.8   |
| Young's modulus          |            | GPa    | 73    | 70   | 77   | 74   | 75   | 70    |
| Dielectric constant      | 1MHz, 25°C |        | 5.3   | 6.2  | 6.5  | 6.8  | 6.9  | 7.7   |
| tan δ                    | 1MHz, 25°C |        | 0.001 | 0.02 | 0.01 | 0.01 | 0.01 | <0.03 |
| Volume resistivity Log ρ | 150°C      | Ω · cm | –     | 8.1  | 8.1  | 8.3  | 8    | 7.1   |
|                          | 250°C      | Ω · cm | –     | –    | 6.8  | –    | 6.2  | –     |

Other types of CTE glass are available upon request.

## Applications

- Substrates for supporting advanced packages
- Substrates for supporting compound semiconductors
- Substrates for supporting grinding processes