

CLAIMS

1. A thermally curable resin sheet for sealing a semiconductor chip, wherein

5 an activation energy (E_a) satisfies the following formula (1),

a product obtained by curing the thermally curable resin sheet at 150°C for 1 hour has a glass transition temperature of 125°C or higher, and

10 a thermal expansion coefficient α [ppm/K] of the product at the glass transition temperature or lower and a storage modulus E' [GPa] at 25°C of the product satisfy the following formula (2):

$30 \leq E_a \leq 120$ [kJ/mol] (1); and

15 $10,000 \leq \alpha \times E' \leq 300,000$ [Pa/K] (2).

2. The thermally curable resin sheet for sealing a semiconductor chip according to claim 1, comprising an epoxy resin, a phenol novolak-based curing agent, an
20 inorganic filler, and a curing accelerator.

3. The thermally curable resin sheet for sealing a semiconductor chip according to claim 2, wherein the inorganic filler is silica having an average particle size
25 of 0.5 μm to 50 μm .