

| ITEM           |                                  |           | MATERIAL                | Pyrolytic<br>Boron Nitride |
|----------------|----------------------------------|-----------|-------------------------|----------------------------|
| Main Component |                                  |           |                         | PBN 99.9995%               |
|                | Density                          |           | g/cm³                   | 1.95 ~ 2.20                |
| MECHANICAL     | Vickers Hardness Load 500g       |           | GPa                     | –                          |
|                | Flexural Strength                |           | MPa                     | 80                         |
|                | Compressive Strength             |           | MPa                     | –                          |
|                | Young’s Modulus                  |           | GPa                     | –                          |
|                | Fracture Toughness               |           | Mpa M <sup>1/2</sup>    | –                          |
| THERMAL        | Coefficient of Thermal expansion | 40 ~ 400℃ | x 10 <sup>-6</sup> / °C | –                          |
|                |                                  | 40 ~ 800℃ |                         | 3.10                       |
|                | Thermal Conductivity (20℃)       |           | W/(m·k)                 | 62                         |
|                | Specific Heater                  |           | J/(kg·K)                | –                          |
|                | Thermal Shock Resistance (ΔT)    |           | ℃                       | 1000                       |
| ELECTRICAL     | Dielectric Strength              |           | V/m                     | –                          |
|                | Volume Resistivity               | 20℃       | Ω ·cm                   | >10 <sup>15</sup>          |
|                |                                  | 300℃      | Ω ·cm                   | –                          |
|                |                                  | 500℃      | Ω ·cm                   | –                          |
| CHEMICAL       | Nitric Acid (60%, 90℃)           |           | Weight Loss mg/cm²/day  | –                          |
|                | Sulphuric Acid (95%, 95℃)        |           |                         | –                          |
|                | Caustic Soda (30%, 80℃)          |           |                         | –                          |