



PRODUCT FOR ELECTRONICS

XENOMAX®

Polyimide Film



NAGASE | Delivering next.

XENOMAX® heat dissipation substrate for Power Semiconductor Module

CERAMIC



Disadvantages

Heavy/Thick
Breakable
High Cost

XENOMAX®

VS.



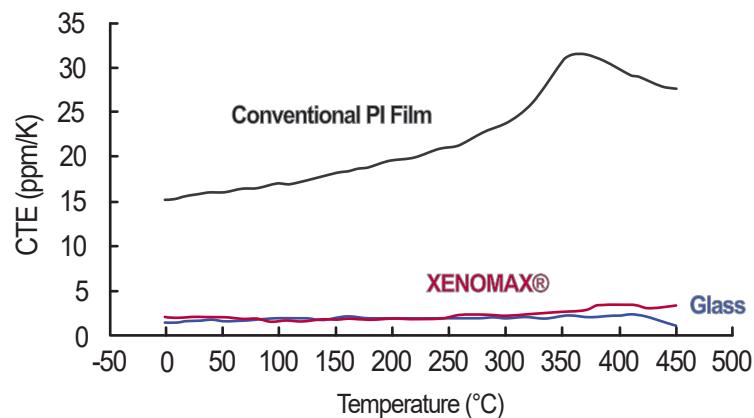
Advantages

Light/Thin
Unbreakable
Low Cost

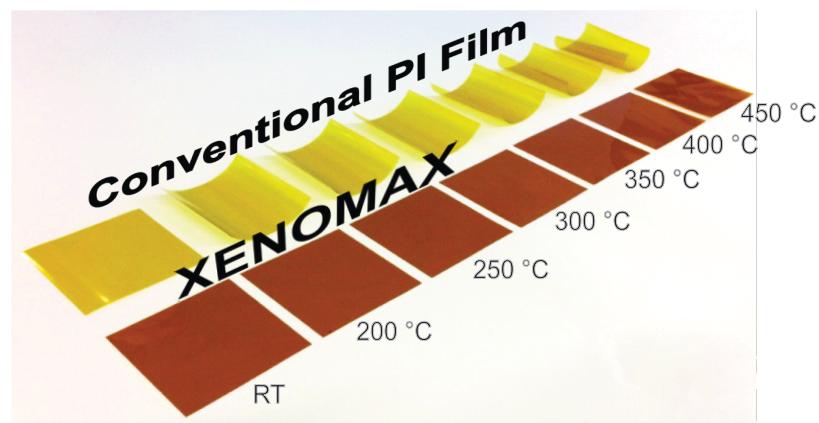
Features

- » High heat stability
- » High flexibility
- » Flatness
- » Good processability
- » Thin
- » Very low CTE
- » Smooth surface

CTE same as glass over 500 °C which is available for LTFS



Available in sheet and/or roll



| | CERAMIC | | XENOMAX® |
|-------------------------------------|-------------------------|-------------------------|---------------------|
| | Al_2O_3 | Si_3N_4 | |
| CTE | 7 | 3 | 3 |
| Thickness (μm) | 635 | 635 | 15 |
| Thermal Conductivity (W/m*K) | 24 | 90 | 0.2 (Z Direction) |
| Heat Resistance (m²*K/W) | 26×10^{-5} | 7×10^{-5} | 75×10^{-5} |
| Dielectric Voltage (kV/mm) | 15 | 13 | 250 (4 kV @ 15 μm) |

* The values shown here are typical values, not guaranteed values.

