AsahiKASEI

XYRON™ Modified-PPE for 5G Base Stations

Customized Grades with Excellent Dielectric Properties

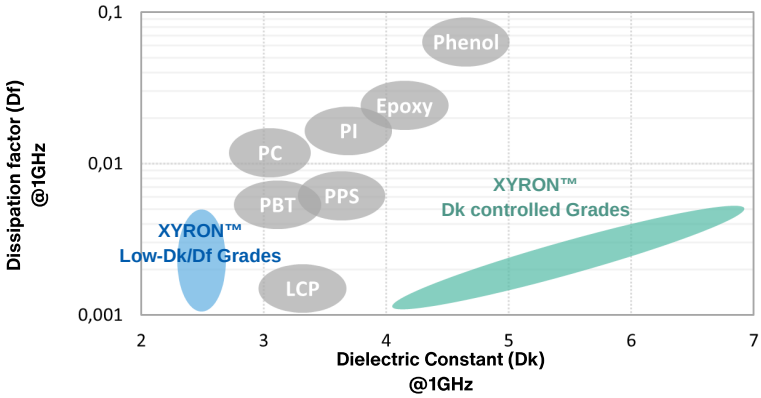
Low Dielectric Needs for 5G Applications

5G networks use higher-frequency radio waves than previous network generations. Higher frequencies of radio waves can lead to radio wave attenuation and transmission loss. To solve these problems, demand for low-dielectric materials has been increasing.

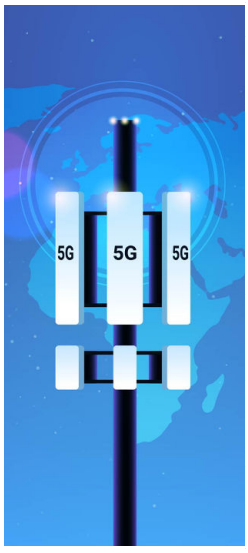
Asahi Kasei's modified polyphenylene XYRON™ provides solutions to a wide range of dielectric requirements in the market by combining the low dielectric properties of PPE with the company's compounding technology.

Dielectric Properties of XYRON™

- Lightweight
- Excellent mechanical properties
- Excellent friction properties and low abrasion
- Rigidity at high temperature



XYRON™ Solutions for 5G Base Stations



Parts	XYRON Proposal Grade	Features	Benefits for Customers
Antenna Cover (Radome)	443Z (PPE+PS)	• Low-Dk/Low-Df • High impact resistance • UL94 V-0	• Improvement of radio wave transmission • Weight reduction
	AA181 (PPE+PS) Development Grade	• Low-Dk/Extremely low-Df • High impact resistance • UL94 V-0	
Phase Machine Frame	AA132 (PPE+PS) Development Grade	• High-Dk/Low-Df • Dk can be controlled on demand • Dimensional stability	• Achievement of high-precision phase control
Antenna Element	DG Series (PPS+PPE)	• Low-Dk/Low-Df • Low specific gravity • Low warpage	• Improvement of antenna efficiency • Improvement of plating process • Weight reduction
LDS Antenna	K4330 (PPE+PS)	• Low-Dk/Low-Df • Compatible with LDS technology • Possible to be flame retardant	• Improvement of antenna efficiency • Weight reduction
Cavity Filter	AA105 (PPE+PS) Development Grade	• Low CLTE in a wide temperature range • Good platability	• Weight reduction • Improvement of plating process

Further Information

Visit: https://www.asahi-kasei-plastics.com/en/trend/5g-01/

Creating for Tomorrow

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