



Polypropylene Blend Thermoplastic Absorber

Eccosorb JCP-PP9 is an injection molded absorber grade based on a proprietary blended polypropylene based material made to match a typical automotive bumper's physical properties. JCP-PP9 has been formulated to achieve significant reduction of electromagnetic interference through absorbing the energy in the 60+ GHz range. Its high impact resistance and compliance, typical of polypropylene, are a perfect match for many automotive, industrial, consumer, and military applications.

FEATURES AND BENEFITS

- High loss
- Low density
- Impact resistant
- Capable of ultrasonic welding
- High Frequency applications
- EMI reduction, particularly in 60+ GHz applications
- Physical properties mirror base thermoplastic material closely
- REACH and ROHS compliant

VALUE AND APPLICATION

- Ability to economically manufacture complex shapes for higher volume products
- Form 3D parts to fit available cavities without the limitations of 2D die cut materials
- Due to the unique loading system, parts molded from JCP-PP9 feel and perform very close to the original polypropylene blend base material with exceptionally high EMI attenuation
- Typical applications in automotive radar bracket to enhance radar performance and reliability for 76-81 GHz
- Automotive radar systems see a significant distortion of their signal, seen in the side lobe of the antenna pattern, because of reflections off the areas surrounding the radar unit and the vehicle bumpers. ReZorb with JCP-PP9 radar brackets absorb the incident signals greatly limiting reflections and reducing noise, false positives and false negatives in signal readings.

PROPERTIES	JCP-PP9 Typical Properties
Color	Black
Operating Temperature	-40°C to 100°C
Attenuation @ 77GHz	160 dB/cm
Density	0.9 g/cc
Tensile Strength	20 MPa
Tensile Elongation	10%
Flexural Strength	20 MPa
Flexural Modulus	865 MPa
Izod impact	41.4 J/m ²
Water Absorption	0.022%
Volume Resistivity	>25,000 Ohm cm

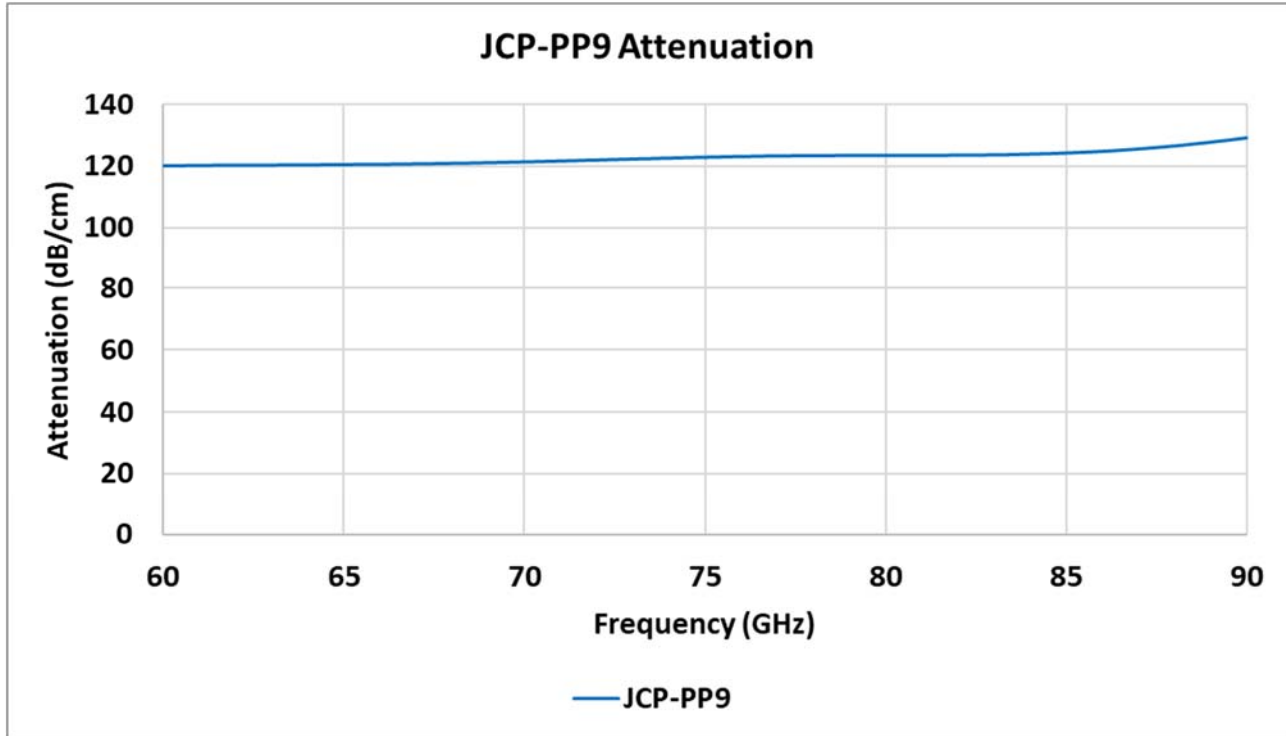
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ATTENUATION



AVAILABILITY

- JCP-PP9 is available as finished injection molded part according to customer's drawing. Please contact the engineering team for feasibility
- Standard sample plaques 100x100 mm available in flat surface 2mm thick and in ReZorb configurations for evaluation

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