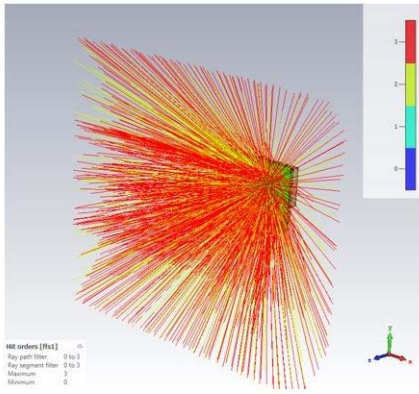


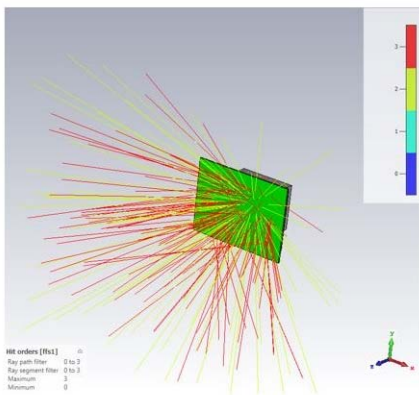


ReZorb Radar Bracket

High Loss & Low Reflection Injection Molded Radar Bracket



Excitation rays in bracket without absorber – Dense ray visualization due to multiple reflections



Excitation rays in bracket with ReZorb – Cleaner ray visualization due to absorption of reflected rays

ReZorb Radar Bracket

ReZorb is a tuned injection molded material and associated physical geometry surface system to achieve significant radar signal reflection reduction. This innovative technology, targeting 60 to 90 GHz band, is ideal for autonomous driving & collision avoidance systems by incorporation as the physical bracket holding the radar units to vehicle bumpers or chassis. ReZorb is available in two materials, JCP-PP9 and JCP-PA, offering identical high frequency signal performance enhancement and can be used interchangeably based on application needs. JCP-PP9 is a proprietary blended polypropylene based material made to match a typical automotive bumper's physical properties offering ultrasonic welding capabilities for attachment. JCP-PA offers a polyamide material with increased rigidity and strength.

FEATURES AND BENEFITS

- High loss
- Low density
- Impact resistant
- Capable of ultrasonic welding
- High frequency radar applications, 76-81 GHz
- EMI reflection reduction
- Physical properties mirror base thermoplastic material
- REACH and ROHS compliant

VALUE AD APPLICATION

- Automotive imaging 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 radar brackets absorb the incident signals greatly limiting reflections and reducing noise, false positives and false negatives in signal readings.
- Radomes can reflect a portion of the signal that passes through them causing EMI and hurting signal accuracy. ReZorb used around an antenna can greatly limit the interference and increase signal performance.
- Due to the unique loading system, ReZorb radar brackets feel and perform very close to the original base thermoplastic material with exceptionally high reflection loss

TYPICAL PROPERTIES	ReZorb JCP-PP9	ReZorb JCP-PA
Color	Black	Black
Operating Temperature	-40°C to 100°C	-40°C to 170°C
Standard Thicknesses	3mm to 5mm	3mm to 5mm
Reflection Loss @ 77GHz	-25 dB	-25 dB
Density	0.9 g/cc	1.24 g/cc
Tensile Strength	20 MPa	100 MPa
Tensile Elongation	10%	2.5%
Flexural Strength	20 MPa	175 MPa
Flexural Modulus	865 MPa	5000 MPa
Izod impact	42 J/m ²	6.77 kg cm/cm
Water Absorption	0.022%	0.98%
Volume Resistivity	>25,000 Ohm cm	>25,000 Ohm cm

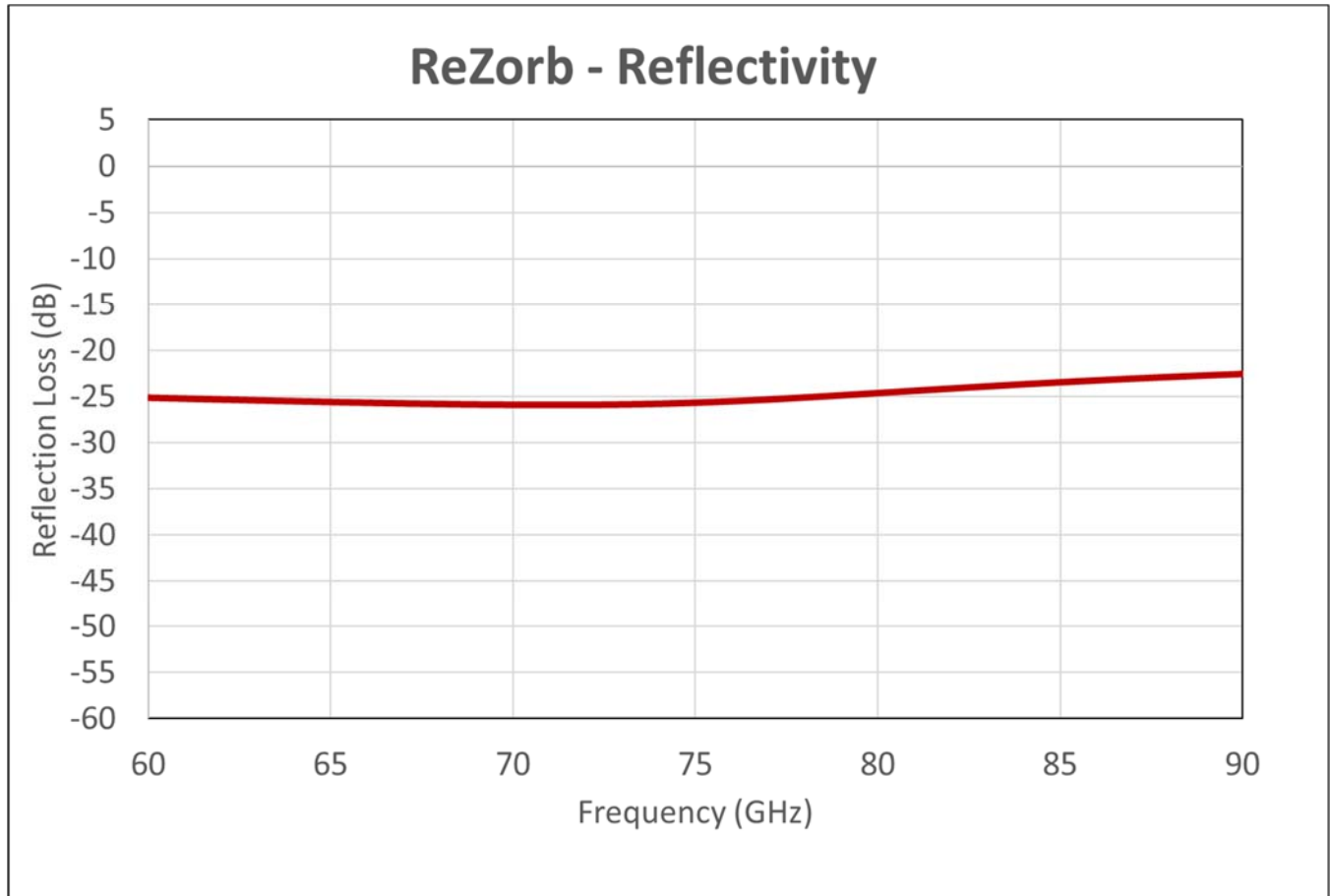
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Reflectivity



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