

# Absorber Plastic Grain (APG)

## Description :

Absorber Plastic Grain (APG) is a special plastic grain, include absorbent material with high percentage. It's suitable for injection molding to produce complex shape to get a good performance to solve the EMI problem in wide band till 18GHz. We not only offer the grain, but also offer the injection molding OEM service.

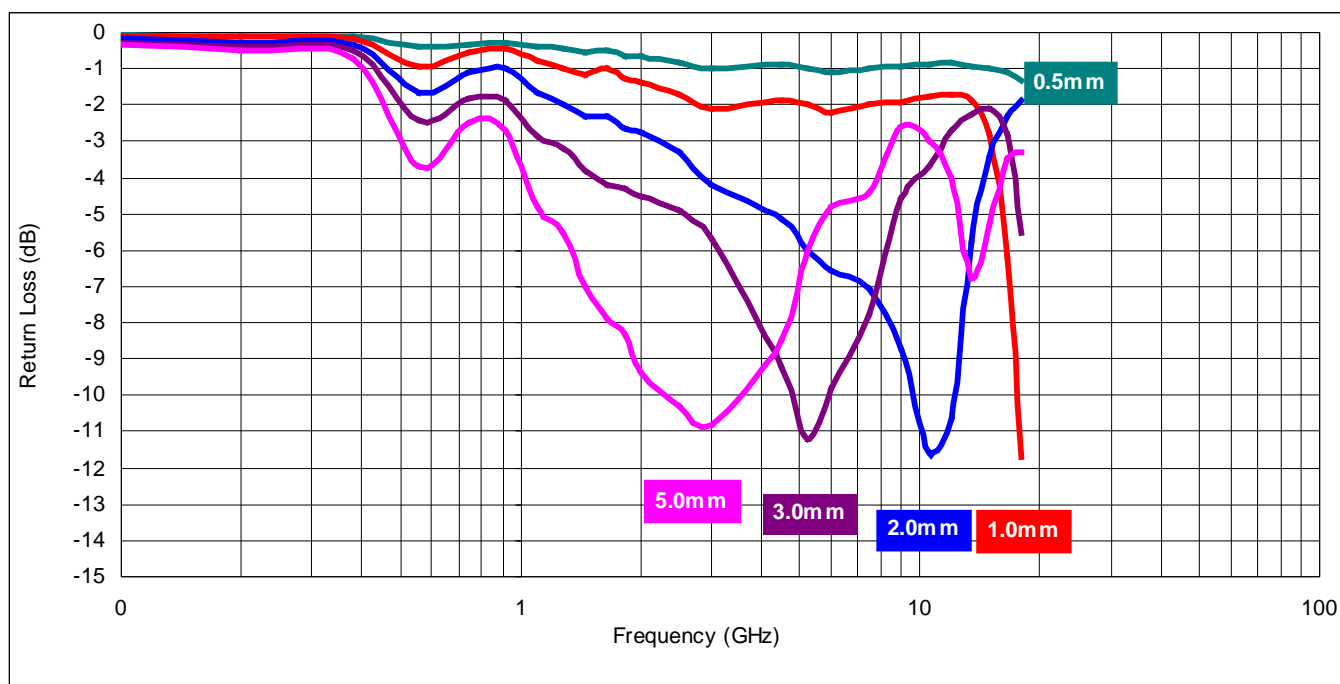
## Feature :

- Absorbent material inside plastic grain
- Suitable for injection molding application
- Suitable for complex shape design
- More thick with more absorption effect
- Recyclable
- RoHS Compliance
- For a product case, both sides can absorb EMI
- Not shielding material, with low electrical conductivity
- Good absorption performance in wide band (18GHz max.)



**RoHS 2.0**  
2011/65/EU

## Thickness - Return Loss chart for reference :



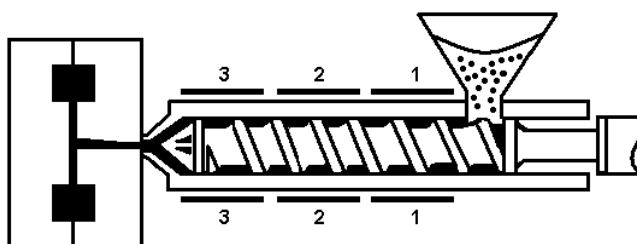
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## Characteristics :

Characteristic	Test Method	Unit	APG-PP
Tensile Strength	ASTM D638	Kg/cm <sup>2</sup>	180
Tensile Modulus	ASTM D638	Kg/cm <sup>2</sup>	41,000
Elongation at break	ASTM D638	%	1.1
Flexural Strength	ASTM D790	Kg/cm <sup>2</sup>	400
Flexural Modulus	ASTM D790	Kg/cm <sup>2</sup>	40,000
Impact Strength	ASTM D256	Kg-cm/cm	6.8
Heat Distortion Temperature	ASTM D648 (66PSI)	°C	120
Melt Index	ASTM D1238 (230°C/2.16Kg)	g/10min	13.0
Shrinkage	ASTM D955	cm/cm	1.0
Specific Gravity	ASTM D792	g/cm <sup>3</sup>	2.5
Surface Resistance	ASTM D257	ohm	10 <sup>5</sup>
RoHS 2.0 Compliance	-	-	2011/65/EU

## Injection molding guide :

- Pre-drying condition : 80 - 100°C 2-3hours
- Injection conditions :



Mold Temperature	Barrel Heater 3	Barrel Heater 2	Barrel Heater 1
30 - 70 °C	190 - 230 °C	190 - 230 °C	180 - 220 °C