



LUPOY ER5001RFA

Injection Molding, PC/ABS

Description

PCR(Post-Consumer Recycled Material) 30%
Halogen Free Flame Retardant

Application

IT/OA, Electrical & Electronic Housing
Laptop Bezel

Properties	Test Condition	Test Method	Unit	Typical Value
Physical				
Specific Gravity		ASTM D792	-	1.18
Molding Shrinkage (Flow), 3.2mm		ASTM D955	%	0.4 ~ 0.6
Melt Flow Rate	260 °C/2.16kg	ASTM D1238	g/10min	23
Mechanical				
Tensile Strength, 3.2mm @ Yield	50mm/min	ASTM D638	kg/cm ²	570
Tensile Elongation, 3.2mm @ Break	50mm/min	ASTM D638	%	50
Flexural Strength, 3.2mm	10mm/min	ASTM D790	kg/cm ²	930
Flexural Modulus, 3.2mm	10mm/min	ASTM D790	kg/cm ²	25,000
IZOD Impact Strength, 3.2mm (Notched)	23°C	ASTM D256	kg·cm/cm	50
Thermal				
Heat Deflection Temperature, 6.4mm (Unannealed)	4.6kg	ASTM D648	°C	93
Flammability		UL94		
1.2mm			class	V-0
1.5mm			class	V-0, 5VB
3.0mm			class	V-0, 5VA
Relative Temperature Index (RTI)		UL 746B		
Electrical			°C	60
Mechanical with Impact			°C	60
Mechanical without Impact			°C	60

Note) Typical values are only for material selection purpose, and variation within normal tolerances are for various colors.

Values given should not be interpreted as specification and not be used for part or tool design.

All properties, except melt flow rate are measured on injection molded specimens and after 48 hours storage at 23°C, 50% relative humidity.

Updated : Feb, 2022

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Processing Guide (Injection Molding)

Processing Parameters		Unit	Value
Drying Temperature		°C	75 ~ 85
Drying Time		hrs	3 ~ 5
Maximum Moisture Content		%	0.04
Melt Temperature		°C	235 ~ 265
Cylinder Temperature	Rear	°C	225 ~ 240
	Middle	°C	240 ~ 255
	Front	°C	245 ~ 275
Nozzle Temperature		°C	235 ~ 265
Mold Temperature		°C	50 ~ 80
Back Pressure		kg/cm ²	-
Screw Speed		rpm	40 ~ 70

Note) Back Pressure & Screw Speed are only mentioned as general guidelines.

These may not apply or need adjustment in specific situations such as low shot sizes, thin wall molding and gas-assist molding.

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