



# **LUPOY GN5001RF**

Injection Molding, PC/ABS

## **Description**

Halogen Free Flame Retardent, Good Flow

## **Application**

E&E (TV, Nevigatio Housing)

Properties	<b>Test Condition</b>	<b>Test Method</b>	Unit	<b>Typical Value</b>
Physical				
Specific Gravity		ASTM D792	-	1.18
Molding Shrinkage (Flow), 3.2mm		ASTM D955	%	0.4 ~ 0.6
Melt Flow Rate	250℃/2.16 kg	ASTM D1238	g/10min	16
Mechanical				
Tensile Strength, 3.2mm		ASTM D638		
@ Yield	50mm/min		kg/cm <sup>2</sup>	600
Tensile Elongation, 3.2mm		ASTM D638		
@ Yield	50mm/min		%	
@ Break	50mm/min		%	50
Tensile Modulus, 3.2mm	1mm/min	ASTM D638	kg/cm <sup>2</sup>	
Flexural Strength, 3.2mm	10mm/min	ASTM D790	kg/cm <sup>2</sup>	900
Flexural Modulus, 3.2mm	10mm/min	ASTM D790	kg/cm <sup>2</sup>	25,000
IZOD Impact Strength, 3.2mm		ASTM D256		40
(Notched)	<b>23</b> ℃		kg·cm/cm	
	-30℃		kg·cm/cm	
Rockwell Hardness	R-Scale	ASTM D785	-	113
Th 1				
Thermal Heat Deflection Temperature, 6.4mm		ASTM D648		
		ASTIVI D040	°C	
(Unannealed)	18.6kg		$^{\circ}$	92
Vicat Softening Temperature	4.6kg	ASTM D1525	$^{\circ}$	92
vicat Softening Temperature	Eka E0°0/b	A31W D1323	${\mathbb C}$	
Ball Pressure Temperature	5kg, 50℃/h	IEC 60695-10-2	°C	
Burning Rate, 3.2mm		FMVSS 302		
Flammability		UL94	mm	
0.7mm		UL94	class	
0.7mm 1.2mm			class	V0
2.5mm			class	V0 V0
2.5mm 3.0mm			class	V0 V0
Relative Temperature Index		UL 746B	Ulass	٧٥
Electrical		UL /40D	°C	80
Mechanical with Impact			°C	80
Mechanical without Impact			$^{\circ}$	85

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

Updated : Aug-01, 2014

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 molulded specimens and after 48 hours storage at 23 °C, 50% relative humidty.





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#### **Electrical**

Comparative Tracking Index(CTI)	Solution A	IEC 60112	Volts	
Surface Resistivity		IEC 60093	Ohm	
Volume Resistivity	<b>23</b> ℃	ASTM D257	Ohm∙m	
Arc Resistance	<b>23</b> ℃	ASTM D495	Ohm·cm	
Dielectric Strength, 1mm	<b>23</b> ℃	ASTM D149	kV/mm	
Dielectric Constant (10 <sup>6</sup> Hz)	<b>23</b> ℃	ASTM D150	sec	

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## Processing Guide (Injection Molding)

Processi	ng Parameters	Unit	Value
Drying Temperature		${\mathbb C}$	75 ~ 85
Drying Time		hrs	3 ~ 5
Maximum Moisture Content		%	0.02
Melt Temperature		${\mathbb C}$	235 ~ 265
Cylinder Temperature	Rear	$^{\circ}$ C	220 ~ 240
	Middle	${\mathbb C}$	235 ~ 255
	Front	${\mathbb C}$	250 ~ 265
Nozzle Temperature		${\mathbb C}$	250 ~ 265
Mold Temperature		${\mathbb C}$	50 ~ 80
Back Pressure		kg/cm <sup>2</sup>	0.2 ~ 0.6
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.

Updated: Aug-01, 204

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