

**XYRON™ AT640**

Asahi Kasei Corporation - Polyamide + PPE

**General Information**
**Product Description**

 Modified PPE  
 PA/PPE alloy  
 Non-reinforced Non-Flame retardant  
 Easy Flow Heat Resistnce High

**General**

Material Status	• Commercial: Active
Availability	• North America
Processing Method	• Injection Molding
Part Marking Code (ISO 11469)	• >PA66+PPE<

**Properties<sup>1</sup>**

Physical	Nominal Value	Unit	Test Method
Density	1.09	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>2</sup> (0.118 in)	1.1	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield, 73°F)	10000	psi	ISO 527
Tensile Strain (Break, 73°F)	17	%	ISO 527
Flexural Modulus (73°F)	334000	psi	ISO 178
Flexural Stress (73°F)	13900	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength <sup>3</sup> (73°F)	12	ft·lb/in <sup>2</sup>	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	340	°F	ISO 75-2/B
CLTE - Flow (-22 to 149°F)	4.7E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (-22 to 149°F)	4.7E-5	in/in/°F	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Dielectric Constant (5.20 GHz)	2.80		SPDR
Dissipation Factor (5.20 GHz)	6.0E-3		SPDR

**Processing Information**

Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	230 to 266	°F
Drying Time - Hot Air Dryer	2.0 to 4.0	hr
Processing (Melt) Temp	536 to 572	°F
Mold Temperature	140 to 248	°F

**Injection Notes**

Recommended processing (melt) temperature of XYRON™ Polyamide + PPE is 280-300°C. Lower temperatures may lead to local degradation in properties due to non-uniform plasticization, while higher temperatures tend to cause silver streaking, other appearance problems and decomposition.

**Notes**

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 120x80x3 mm

<sup>3</sup> 4 mm

