PREPERM® L1000HF

Polyphenylene Ether

Premix Oy

Message:

PREPERM® L1000HF is a special compound with elevated dielectric constants of 10.

PREPERM® L1000HF is a special compound based on Premix proprietary PPE technology. Extremely low dissipation factor (< 0.001) makes PREPERM® L1000HF an excellent material for high frequency applications. PREPERM® L1000HF offers stable dielectric constant over wide frequency and wide temperature range. PREPERM® L1000HF is modified for injection moulding.

Applications include structural parts for antennas in base stations, point to point, wlan, mobile phones etc. Devices made out of PREPERM® can operate at very high frequencies as PREPERM® offers stable performance even at 120 GHz.

General Information					
Features	Good electrical performance				
Uses	Electrical/Electronic Applications				
	Electrical components				
	Components				
RoHS Compliance	RoHS compliance				
Forms	Particles				
Processing Method	Injection molding				
Physical	Nominal Value	Unit	Test Method		
Density	2.32	g/cm³			
Melt Mass-Flow Rate (MFR) (300°C/5.0 kg)	8.0	g/10 min	ISO 1133		
Molding Shrinkage	0.40	%	ISO 294-4		
Mechanical	Nominal Value	Unit	Test Method		
Tensile Stress (4.00 mm)	45.0	MPa	ISO 527-2		
Tensile Strain (Break, 4.00 mm, Injection Molded)	3.0	%	ISO 527-2		
Flexural Modulus (4.00 mm)	6200	MPa	ISO 178		
Impact	Nominal Value	Unit	Test Method		
Notched Izod Impact (23°C)	3.0	kJ/m²	ISO 180		
Unnotched Izod Impact Strength (23°C)	15	kJ/m²	ISO 180		
Thermal	Nominal Value	Unit	Test Method		
Heat Deflection Temperature					
0.45 MPa, not annealed	126	°C	ISO 75-2/Bf		
1.8 MPa, not annealed	122	°C	ISO 75-2/Af		
Electrical	Nominal Value		Test Method		
Dielectric Constant (1.00 GHz)	10.0		Internal method		
Dissipation Factor (1.00 GHz)	8.0E-4		Internal method		
Injection	Nominal Value	Unit			
Drying Temperature	90.0 - 100	°C			
Drying Time	2.0 - 4.0	hr			

Processing (Melt) Temp	280 - 310	°C	
Mold Temperature	80.0 - 110	°C	
Injection Rate	Moderate-Fast		
Injection instructions			

Injection Pressure: High

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Recommended distributors for this material

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