

RTP 287 HEC

Polyamide 66

RTP Company

Message:

Nickel-Coated Carbon Fiber - Electrically Conductive - EMI/RFI/ESD Protection

General Information			
Filler / Reinforcement	Nickel-plated carbon fiber, 40% filler by weight		
Features	Conductivity		
	Electromagnetic shielding (EMI)		
	Electrostatic discharge protection		
	Radio frequency shielding (RFI)		
RoHS Compliance	Contact manufacturer		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.39	g/cm ³	ASTM D792
Molding Shrinkage - Flow (3.20 mm)	0.10 - 0.20	%	ASTM D955
Moisture Content	0.20	%	
Static Decay ¹		sec	FTMS 101C 4046.1
Primary Additive	40	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	17900	MPa	ASTM D638
Tensile Strength	160	MPa	ASTM D638
Tensile Elongation (Yield)	1.0 - 2.0	%	ASTM D638
Flexural Modulus	16500	MPa	ASTM D790
Flexural Strength	260	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (3.20 mm)	75	J/m	ASTM D256
Unnotched Izod Impact (3.20 mm)	530	J/m	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	249	°C	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity			
--	< 1.0E+3	ohms	ASTM D257
--	< 1.0E+2	ohms	ESD STM11.11
Volume Resistivity	< 1.0	ohms · cm	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.50 mm, ** Values per RTP Company testing.)	HB		UL 94

Injection	Nominal Value	Unit
Drying Temperature	79.4	°C
Drying Time	4.0	hr
Dew Point	-17.8	°C
Processing (Melt) Temp	282 - 299	°C
Mold Temperature	65.6 - 107	°C
Injection Pressure	68.9 - 124	MPa

Injection instructions

Use a reverse barrel profile. Remove hopper magnets. Allow 4 - 5 shots to properly disperse the conductive fibers. The surface finish should have a silver streaking appearance, not clumps. Remove hopper magnets. Desiccant Type Dryer Required.

NOTE

1. MIL-PRF-81705D, 5kV to 50 V, 12% RH

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

