



October, 2016

FZ-1140-D5

- Product Summary: FZ-1140-D5 is a 40% glass fiber reinforced branched PPS compound with reduced flash and improved mechanical properties for use in connectors.
- Color: Black and Natural (Brown)

Engineering Properties of FZ-1140-D5

Properties	Test Method	Unit	FZ-1140-D5
General Information			GF40% Low flash
Physical			
Density	ISO 1183	g/cm³	1.67
Water absorption, 23°C /24hrs.	ISO 62	%	0.02
Mold shrinkage ^a	ISO 294-4	%	0.3/0.7
Mechanical			
Tensile strength	ISO 527-1,2	MPa	200
Tensile modulus	ISO 527-1,2	GPa	17.0
Tensile strain at break	ISO 527-1,2	%	1.6
Flexural strength	ISO 178	MPa	300
Flexural modulus	ISO 178	GPa	16.5
Flexural strain at break	ISO 178	%	1.9
Charpy impact strength,			
notched	ISO 179/1eA	kJ/m²	10
unnotched	ISO 179/1eU	kJ/m²	50
Co-eff. of friction b, static/dynamic	-	-	0.35/0.35
Thermal			
Heat deflection temperature, 1.80MPa	ISO 75-1,2	°C	270
Co-eff. of linear thermal expansion a, -50~50 °C	ISO 11359-2	x 10 ⁻⁵ /K	1.5/4.0
Co-eff. of linear thermal expansion a, 100~200 °C Flammability c/thickness (mm)	ISO 11359-2	x 10 ⁻⁵ /K	1.5/10.5
	UL-94	-	V-0/0.36
Electrical			
Dielectric strength, t=1.0mm	IEC 60243-1	kV/mm	25
Dielectric constant, 1MHz	IEC 60250	-	4
Dissipation factor, 1MHz	IEC 60250	-	0.003
Comparative Tracking Index (CTI)	IEC 60112	V	175
Volume resistivity	IEC 60093	Ω·cm	10 ¹⁶
Molding Condition			
Cylinder temperature	-	°C	300-340
Mold temperature	-	°C	130-150

a: Flow direction/Transverse direction

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Please refer to Safety Data Sheet for safety precautions prior to use. The information contained in this data sheet is based on tests or research DIC Corporation ('DIC') believes to be reliable, but no warranty is given by DIC concerning the accuracy or completeness thereof. The supply of the information does not release the recipient from the obligation to test the products as to their suitability for the intended applications and processes. DIC has no liability for any consequence of the application, processing or use of the information or the products. Information concerning the application of the products is not and should not be construed as a warranty as to non-infringement of intellectual property for a particular application.

b: P=150kPa, V=0.3m/s, PPS vs. carbon steel

c: UL file No. E53829