

FZ-4020-A1

- **Product Summary:** FZ-4020-A1 is a 40% glass fiber reinforced low halogen type of PPS compound with superior solder heat resistance.
- **Color:** Black and Natural

Engineering Properties of FZ-4020-A1

Properties	Test Method	Unit	FZ-4020-A1
General Information			GF40% Cl<900ppm High heat resistance
Physical			
Density	ISO 1183	g/cm ³	1.63
Water absorption, 23°C /24hrs.	ISO 62	%	0.04
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	15.5
Tensile strain at break	ISO 527-1,2	%	1.7
Flexural strength	ISO 178	MPa	295
Flexural modulus	ISO 178	GPa	15.0
Flexural strain at break	ISO 178	%	1.9
Charpy impact strength, notched	ISO 179/1eA	kJ/m ²	9
Charpy impact strength, unnotched	ISO 179/1eU	kJ/m ²	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	1.5/4.5
Co-eff. of linear thermal expansion ^a , 100~200 °C	ISO 11359-2	x 10 ⁻⁵ /K	1.5/12.0
Flammability ^c /thickness (mm)	UL-94	-	V-0/0.75
Electrical			
Dielectric strength, t=1.0mm	IEC 60243-1	kV/mm	25
Dielectric constant, 1MHz	IEC 60250	-	4
Dissipation factor, 1MHz	IEC 60250	-	0.004
Comparative Tracking Index (CTI)	IEC 60112	V	200
Volume resistivity	IEC 60093	Ω·cm	10 ¹⁶
Molding Condition			
Cylinder temperature	-	°C	320-350
Mold temperature	-	°C	130-150

a: Flow direction / Transverse direction

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

c: UL file No. E53829