

FZ-4020-A1, FZ-4020-A1 BLACK

■ **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			
Properties	Test Method	Unit	Typical value
General Information			GF40% Cl;<900ppm High heat resistance
Physical			
Density	ISO 1183-1	g/cm ³	1.62
Water absorption, 23°C /24hrs.	ISO 62	%	0.08
Mold shrinkage ^a	ISO 294-4	%	0.3/0.7
Mechanical			
Tensile strength	ISO 527-1,2	MPa	195
Tensile modulus	ISO 527-1,2	GPa	15.0
Tensile strain at break	ISO 527-1,2	%	1.7
Flexural strength	ISO 178	MPa	290
Flexural modulus	ISO 178	GPa	14.5
Flexural strain at break	ISO 178	%	2.0
Charpy impact strength, notched	ISO 179/1eA	kJ/m ²	8
unnotched	ISO 179/1eU	kJ/m ²	45
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 %/thickness (mm)	UL94	-	-
Electrical			
Dielectric strength, t=1.0mm	IEC 60243-1	kV/mm	25
Dielectric constant, 1MHz	IEC 60243-2-1	-	4
Dissipation factor, 1MHz	IEC 60243-2-1	-	0.004
Comparative Tracking Index (CTI)	IEC 60112	V	200
Volume resistivity	IEC 60243-3-1	Ω·cm	10 ¹⁶
Molding Condition			
Cylinder temperature	-	°C	320-350
Mold temperature	-	°C	130-150

a: Flow direction / Transverse direction

b: UL file No. E53829