



April, 2024

Z-650-SW BLACK

■ Product Z-650-SW is a glass fiber and special filler filled super tough PPS compound that provides low warpage, excellent impact resistance, thermal shock resistance properties and flowability.

■ Color: Black

Engineering Properties

Properties	Test Method	Unit	Typical value
General Information			GF/Filler Super tough, High flow
Physical			
Density Water absorption, 23°C/24hrs. Mold shrinkage ^a Mechanical	ISO 1183-1 ISO 62 ISO 294-4	g/cm³ % %	1.70 0.02 0.4/0.6
Tensile strength Tensile modulus Tensile strain at break Flexural strength Flexural modulus Flexural strain at break Charpy impact strength, notched unnotched	ISO 527-1,2 ISO 527-1,2 ISO 527-1,2 ISO 178 ISO 178 ISO 178	MPa GPa % MPa GPa % kJ/m² kJ/m²	160 14.5 1.8 260 14.5 2.0
Thermal			
Heat deflection temperature, 1.80MPa Co-eff. of linear thermal expansion ^a , -50~50 °C Co-eff. of linear thermal expansion ^a , 100~200 °C	ISO 75-1,2 ISO 11359-2 ISO 11359-2	°C x 10 ⁻⁵ /K x 10 ⁻⁵ /K	270 1.3/3.5 1.4/9.3
Electrical			
Dielectric strength, t=1.0mm Dielectric constant, 1MHz Dissipation factor, 1MHz Comparative Tracking Index (CTI) Volume resistivity	IEC 60243-1 IEC 62631-2-1 IEC 62631-2-1 IEC 60112 IEC 62631-3-1	kV/mm - - V Ω·cm	26 - - 175 10 ¹⁶
Molding Condition			
Cylinder temperature Mold temperature	- -	°C °C	300-320 130-150

a: Flow direction/Transverse direction

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