

Xytron™ G3080R

PPS–GF30

30% Glass Reinforced, Flame Retardant, Excellent Mold Release, Low Flash

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	VALUE		
Molding shrinkage (parallel)	0.21	%	ISO 294–4
Molding shrinkage (normal)	0.65	%	ISO 294–4
MECHANICAL PROPERTIES			
	VALUE		
Tensile modulus	12000	MPa	ISO 527–1/–2
Tensile modulus (120°C)	4700	MPa	ISO 527–1/–2
Tensile modulus (160°C)	3500	MPa	ISO 527–1/–2
Tensile modulus (200°C)	2950	MPa	ISO 527–1/–2
Stress at break	170	MPa	ISO 527–1/–2
Stress at break (120°C)	70	MPa	ISO 527–1/–2
Stress at break (160°C)	55	MPa	ISO 527–1/–2
Stress at break (200°C)	45	MPa	ISO 527–1/–2
Strain at break	2	%	ISO 527–1/–2
Strain at break (120°C)	4.6	%	ISO 527–1/–2
Strain at break (160°C)	5.3	%	ISO 527–1/–2
Strain at break (200°C)	5.4	%	ISO 527–1/–2
Flexural modulus	10000	MPa	ISO 178
Flexural strength	240	MPa	ISO 178
Flexural modulus (120°C)	4500	MPa	ISO 178
Flexural modulus (160°C)	3300	MPa	ISO 178
Flexural modulus (200°C)	2900	MPa	ISO 178
Charpy impact strength (+23°C)	58	kJ/m²	ISO 179/1eU
Charpy impact strength (–30°C)	56	kJ/m²	ISO 179/1eU

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Charpy notched impact strength (+23°C)	9	kJ/m²	ISO 179/1eA
Charpy notched impact strength (−30°C)	8	kJ/m²	ISO 179/1eA
Rockwell hardness, R scale	120	—	ISO 2039-2
Rockwell hardness, M scale	100	—	ISO 2039-2

THERMAL PROPERTIES	VALUE		
Melting temperature (10°C/min)	280	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	265	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.18	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.5	E-4/°C	ISO 11359-1/-2
Coef. of lin. therm expansion, parallel, above Tg	0.18	E-4/°C	ISO 11359-1/-2
Coef. of lin. therm expansion, normal, above Tg	1.2	E-4/°C	ISO 11359-1/-2
Burning Behav. at 3.0 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	3	mm	IEC 60695-11-10
UL recognition	Yes	—	—
Relative Temperature Index – electrical	130	°C	UL746B
RTI electrical (Thickness (1) tested)	0.4	mm	UL746B

ELECTRICAL PROPERTIES	VALUE		
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Electric strength	34	kV/mm	IEC 60243-1
Comparative tracking index	175	V	IEC 60112
Dissipation factor (5GHz)	45	E-4	IEC 61189-2-721
Relative permittivity (5GHz)	3.8	—	IEC 61189-2-721

OTHER PROPERTIES	VALUE		
Density	1550	kg/m³	ISO 1183
Humidity absorption	0.05	%	Sim. to ISO 62