



PITCH BASED CARBON FIBER
GRANOC YARN YS-A Series
 (Ultra High Modulus and High Thermal Conductivity)

		YS-80A	YS-90A	YS-95A
Tensile Strength	ksi	530	510	510
	kgf/mm ²	370	360	360
	MPa	3630	3530	3530
Tensile Modulus	msi	114	130	134
	10 ³ kgf/mm ²	80	90	94
	GPa	785	880	920
Ultimate Elongation	%	0.5	0.3	0.3
Density	g/cm ³	2.17	2.18	2.19
Filament Diameter	μm	7	7	7
Filaments per Yarn		1000/3000/6000	1500/3000/6000	1500/3000/6000
Yield	g/km	75/250/520	125/250/520	125/250/520
CTE	10 ⁻⁶ /K	-1.5	-1.5	-1.5
Thermal Conductivity	W/m·K	320	500	600
Electrical Resistivity	10 ⁻⁴ Ω·cm	5	3	2.2

- Notes :
- (1) YS-A grade is based on coal tar pitch.
 - (2) Above figures are typical values at room temperature, not guaranteed values.
 - (3) The tensile strength and tensile modulus are measured with the impregnated strand test.
 - (4) These data may be revised if necessary.



Laminate properties / YS-A series

			YS-80A	YS-90A	YS-95A
0 deg Tensile	Strength	MPa	1960	1900	1900
	Modulus	GPa	470	520	540
	Elongation	%	0.4	0.3	0.3
0 deg Compressive	Strength	MPa	380	360	340
	Modulus	GPa	460	520	540
90 deg Tensile	Strength	MPa	32	25	25
	Modulus	GPa	5.9	5.6	5.5
Short beam shear	Strength	MPa	64	60	60

● These properties are based on 250F cure Epoxy resin prepreg for a fiber volume(V_f) of 60%

Notes: (1) Above figures are typical values at room temperature, not guaranteed values.

(2) These data may be revised if necessary.

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