

# M60J

## HIGH MODULUS CARBON FIBER

M60J carbon fiber is an MJ-type high modulus fiber with enhanced tensile and compressive strength as compared to M series fibers. Manufactured in Japan.

### PRODUCT DESIGNATION

M60J	B	6,000	5	0	B
Fiber Type	Twist*	Filament Count	Sizing Type	Surface Treatment	Sizing Amount

\* B: Untwisted

### FIBER PROPERTIES

PROPERTY	ENGLISH	METRIC	METHOD
Tensile Strength	554 ksi	3,820 MPa	TY-030B-01
Tensile Modulus	85.3 Msi	588 GPa	TY-030B-01
Strain at Failure		0.7%	TY-030B-01
Density		1.93 g/cm <sup>3</sup>	TY-030B-02
Filament Diameter		5 μm	
Yield	3K	103 g/1000m	TY-030B-03
	6K	206 g/1000m	TY-030B-03

### FUNCTIONAL PROPERTIES

PROPERTY	VALUE
CTE	-1.1 α · 10 <sup>-6</sup> /°C
Specific Heat	0.732 J/g · °C
Thermal Conductivity	1.505 J/cm · s · °C
Electric Resistivity	0.7 x 10 <sup>-3</sup> Ω · cm
Chemical Composition: Carbon	>99%
Na + K	<50 ppm

### RESIN SYSTEM COMPATIBILITY

SIZING TYPE & AMOUNT	RESIN SYSTEM COMPATIBILITY	METHOD
50B (1.5%)	Epoxy, phenolic, polyester, vinyl ester	TY-030B-05

### COMPOSITE PROPERTIES

PROPERTY	ENGLISH	METRIC	METHOD
Tensile Strength*	292 ksi	2,010 MPa	ASTM D-3039
Tensile Modulus*	52 Msi	360 GPa	ASTM D-3039
Tensile Strain		0.55%	ASTM D-3039
Compressive Strength*	115 ksi	790 MPa	SACMA SRM 1R-94
Flexural Strength*	155 ksi	1,070 MPa	ASTM D-790
Flexural Modulus*	44 Msi	301 GPa	ASTM D-790
ILSS	10 ksi	70.3 MPa	SACMA SRM 8R-94
In Plain Shear Strength	8 ksi	55 MPa	ASTM D-3518
90° Tensile Strength	5 ksi	34 MPa	ASTM D-3039

\*Normalized to 60% fiber volume. Cured with #2500 epoxy at 130 °C.

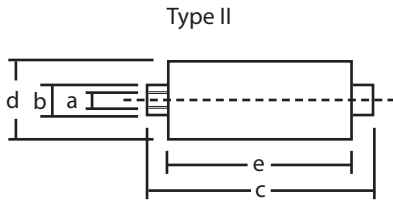


**PACKAGING**

The table below summarizes the tow sizes, twists, sizing types, and packaging available for standard material. Other bobbin sizes may be available on a limited basis.

TOW SIZES	BOBBIN NET WEIGHT (kg)	BOBBIN TYPE	BOBBIN SIZE (mm)					SPOOL PER CASE	CASE NET WEIGHT (kg)
			a	b	c	d	e		
3K	0.25	II	76	82	192	94	156	20	5
6K	0.4	II	76	82	192	103	156	20	8

**Bobbin Type:**



Please refer to SDS for handling and disposal.

**For more information or purchasing inquiries:**  
[sales@toraycma.com](mailto:sales@toraycma.com) | [www.toraycma.com](http://www.toraycma.com) | 253-846-1777