# **BETRONIC FM**



### Description

BETRONIC FM is a composite material which is made by fiberglass reinforcement and thermosetting resin. **Reinforcement:** Thermosetting resin, heavy-duty fiberglass reinforced plastic.

## Application

BETRONIC FM is applicable to wave and reflow solder pallet, selective soldering, electronic components automatic cartridge, SMT surface mount technology and online testing jig.

#### Availability

Thickness: 3 mm ~ 80 mm.

Dimension: 1020 x 1220 mm, 1220 x 2440 mm.

#### **Specification Data Sheet**

Properties/Items	Unit	BETRONIC FM41	BETRONIC FM42	BETRONIC FM42G	BETRONIC FM43
Grade	N/A	ESD	Thermal ESD	Optical ESD	Long Pallet
Color	N/A	Black	Black	Grey	Black
Density	g/cm <sup>3</sup>	1.9	1.9	1.9	1.9
Water Absorption	%	0.2	0.2	0.2	0.2
Flexural strength	MPA(23°C)	300	320	320	350
Flexural strength	MPA(150°C)	110	155	155	180
Flexural modulus of elasticity	MPA(23°C)	17000	18000	18000	19000
Flexural modulus of elasticity	MPA(150°C)	7000	8000	8000	9000
Coefficient of linear expansion	10 <sup>-6</sup> /K	13	10	10	10
Thermal conductivity	W/(mºK)	0.24	0.21	0.21	0.2
Transient working temperature	°C	320	320	320	350
Continuous working temperature	°C	270	280	280	300
Specific surface resistance	Ω	$10^{5} \sim 10^{9}$	$10^{5} \sim 10^{9}$	$10^{5} \sim 10^{9}$	$10^{5} \sim 10^{9}$
Thickness tolerance	mm	-0.1 ~ +0.1	-0.1 ~ +0.1	-0.1 ~ +0.1	-0.1 ~ +0.1
Flatness tolerance (300x300mm)	mm	0.2	0.2	0.2	0.2
Chemical resistance	N/A	Good	Excellent	Excellent	Excellent

All information on the results of experiments performed with all due care in the laboratories. It does not in any way reduce the responsibility of the user for carrying out further tests in order to ensure successful processing and use in specific applications. RoHS Declaration: This material does not contain any substances of very high concern as listed in the EU directive 2011/65/EU, article 4, paragraph 1.