



## SUMIKASUPER E6109F

		Method	Unit	E6109F
Color				Black
Filler		-		Inorganic
Glass fiber type		-		-
Filler content		-	%	45
<b>Physical property</b>				
Specific gravity		ASTM D792		1.80
Mold shrinkage	MD	Sumitomo Original* <sup>1</sup>	%	0.25
	TD		%	1.21
<b>Mechanical property</b>				
Tensile	strength	ASTM D638	MPa	126
	elongation		%	5.5
	strength	ISO 527	MPa	88
	modulus		GPa	-
	elongation		%	2.2
Flexural	strength	ASTM D790	MPa	112
	modules		GPa	11.5
	strength	ISO 178	MPa	119
	modulus		GPa	9.9
Izod impact strength		D256	J/m	382
Non-notched		ISO 180	J/m	280
Charpy impact strength		ISO 179	J/m	-
Non-notched				38
Rockwell strength			R scale	91
<b>Thermal property</b>				
TDUL		ASTM D648	deg C	270
1.82MPa for ASTM/1.80MPa for ISO		ISO 75	deg C	247
Solder resistance		Sumitomo Original* <sup>2</sup>	deg C	300
Liner expansion coefficient	MD	Sumitomo Original* <sup>3</sup>	×10 <sup>-5</sup> /deg C	1.4
	TD			7.8
Thermal Conductivity		JIS R2618	W/mk	-
			kcal/mhrdeg C	-
<b>Electrical property</b>				
Dielectric constant		ASTM D150	1MHz	-
			1GHz	-
Dielectric tangent			1MHz	-
			1GHz	-
Dielectric breakdown voltage		Short time method	kV/mm	-
Specific volume resistance		ASTM D257	Ωm	10 <sup>13</sup>
Specific surface resistance			Ω	-

Arc resistance	ASTM D495	sec.	-
Tracking resistance	IEC method	V	-
<b>Flammability</b>			
Flame retardency	UL 94		V-0 0.81 mmt
Limited Oxygen Index	JIS K 7201		-

<Note>

All the data above are just for reference, not intended for any guarantee on the product.

\*1: The tool of 64mm X 64mm X 3mmt was used to determine mold shrinkages.

\*2: The highest temperature at which dumbbell shaped test pieces of 1.2mmt does not deform after immersing in a solder bath for 60 seconds.

\*3: The center part of the test piece for tensile property was used.

<b>Standard molding conditions</b>			
Pre-drying		deg C for hours	About 130 deg C for 4 to 24 hours
Cylinder temperature	Nozzle	deg C	340 to 360
	Front	deg C	340 to 360
	Middle	deg C	320 to 340
	Rear	deg C	280 to 320
Suitable resin temperature		deg C	350
Tool (Mold) temperature		deg C	40 to 160
Injection velocity		-	Middle to High
Injection pressure		MPa	80 to 160
Holding pressure		MPa	20 to 40
Back pressure		MPa	1 to 5
Screw rotation		rpm	50 to 100