



## SUMIKASUPER E408 MR

		Method	Unit	E408 MR
Color				Natural, Black
Filler		-		Glass fiber
Glass fiber type		-		Milled
Filler content		-	%	40
<b>Physical property</b>				
Specific gravity		ASTM D792		1.70
Mold shrinkage	MD	Sumitomo Original*1	%	0.10
	TD		%	1.32
<b>Mechanical property</b>				
Tensile	strength	ASTM D638	MPa	150
	elongation		%	5.0
	strength	ISO 527	MPa	103
	modulus		GPa	11.9
Flexural	strength	ASTM D790	MPa	139
	modules		GPa	12.3
	strength	ISO 178	MPa	153
	modulus		GPa	12.9
Izod impact strength		D256	J/m	520
Non-notched		ISO 180	J/m	425
Charpy impact strength		ISO 179	J/m	54
Non-notched				
Rockwell strength			R scale	91
<b>Thermal property</b>				
TDUL		ASTM D648	deg C	313
1.82MPa for ASTM/1.80MPa for ISO		ISO 75	deg C	304
Solder resistance		Sumitomo Original*2	deg C	330
Liner expansion coefficient	MD	Sumitomo Original*3	$\times 10^{-5}/\text{deg C}$	1.4
	TD			6.2
<b>Electrical property</b>				
Dielectric constant		ASTM D150	1MHz	3.9
			1GHz	-
Dielectric tangent			1MHz	0.034
			1GHz	-
Dielectric breakdown voltage		Short time method	kV/mm	43
Specific volume resistance		ASTM D257	$\Omega\text{m}$	$10^{13}$
Specific surface resistance			$\Omega$	$10^{16}$
Arc resistance		ASTM D495	sec.	130
Tracking resistance		IEC method	V	145
<b>Flammability</b>				
Flame retardency		UL 94		V-0 at 0.3mmt
Limited Oxygen Index		JIS K 7201		48

<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	370 to 390
	Front	deg C	370 to 390
	Middle	deg C	350 to 370
	Rear	deg C	330 to 350
Suitable resin temperature		deg C	380
Tool (Mold) temperature		deg C	40 to 160
Injection velocity		-	Middle to High
Injection pressure		MPa	120 to 160
Holding pressure		MPa	40 to 60
Back pressure		MPa	1 to 5
Screw rotation		rpm	50 to 100