

## THERMAL FILLER PAD

### G Series

#### Application:

- Computer Internals.
- Power Transistors.
- Power Supply Equipment.



Part Number		G16LH19	G19LH19	G40LH65	G65LH65	G31LH82	Remark
Thermal Conductivity (W/m.K)	Our Tests	1.9	1.9	6.5	6.5	8.2	-
	Hot Wire Method *1	1.2	1.2	2.1	2.1	3.1	JIS R 2616
Appearance		White	Blue	Gray	Reddish Brown	Gray	-
Specific Gravity		1.7	1.7	2.9	2.8	3.0	JIS K 6249
Hardness (Asker C)		60	90	45	65	40	ASTM D2240
Specific Volume Resistance Ratio (Ω.cm)		6.1 x 10 <sup>13</sup>	3.1 x 10 <sup>12</sup>	7.1 x 10 <sup>12</sup>	4.4 x 10 <sup>12</sup>	1.2 x 10 <sup>12</sup>	JIS K 6249
Tensile Strength (MPa)		0.21	0.14	0.35	0.10	0.69	JIS K 6249
Elongation (%)		205	480	68	132	35	JIS K 6249
Compression Set (%)		15	51	72	75	63	JIS K 6249
Dielectric Dissipation Factor	<50Hz>	0.071	0.055	0.006	0.058	8.4	JIS K 6249
	<1kHz>	0.046	0.034	0.002	0.041	7.3	JIS K 6249
	<1MHz>	0.007	0.006	0.0004	0.011	6.5	JIS K 6249
Dielectric Constant	<50Hz>	4.8	4.6	5.6	6.8	0.171	JIS K 6249
	<1kHz>	4.3	4.2	5.0	6.5	0.060	JIS K 6249
	<1MHz>	4.0	3.9	5.5	6.0	0.060	JIS K 6249
Dielectric Breakdown Voltage (kV/mm)		18.8	16.5	12.5	13.6	0.0151	JIS K 6249
Low Molecular Weight Siloxane Level ΣD4-10 (ppm)	Solvent Extraction	< 600	< 700	< 300	< 13	tbc	Solvent Extraction
	Head Space *2	< 5	< 1	< 1	-	tbc	-
Flame Retardance		V-1 (0.5 mmt) V-0 (1.0 ~ 3.0 mmt)	V-0 (0.5 ~ 3.0 mmt)	V-0 (0.5 ~ 3.0 mmt)	V-0 (0.5 ~ 3.0 mmt)	V-0	UL94
RoHS Controlled Substances *3		Not Detected	Not Detected	Not Detected	Not Detected	Not detected	-
Temperature Range (°C) *4		- 40 ~ +150	- 40 ~ +150	-40 ~ +150	-40 ~ +150	-40 ~ +150	-

\*1 Hot Wire Method: Using the QTM-500 Quick Thermal Conductivity Meter from Kyoto Electronics Manufacturing Co, Ltd.

\*2 Head Space Method: at 70°C.

\*3 RoHS controlled substances: Assayed by DGD Far East Ltd.

\*4 Temperature Range: These temperature ranges are not guaranteed by AMEC Thermasol.

The applicability should be determined through actual tests under actual conditions.

#### AMEC Thermasol

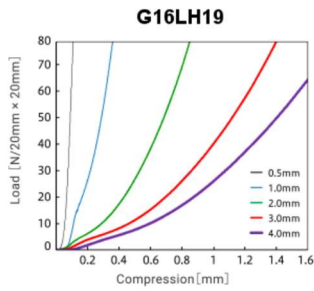
Marcom House, 1-2 Steam Mill Lane, Great Yarmouth, Norfolk, NR31 0HP

Telephone: +44(0) 1493 668622

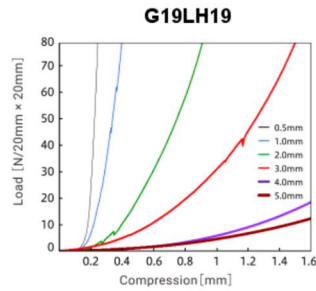
Email: [sales@amecthermasol.co.uk](mailto:sales@amecthermasol.co.uk) Website: [www.amecthermasol.co.uk](http://www.amecthermasol.co.uk)

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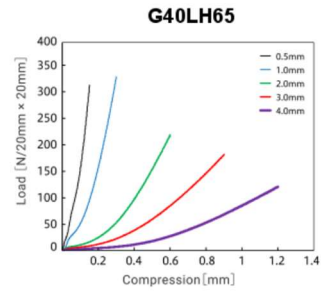
### Compression Characteristics



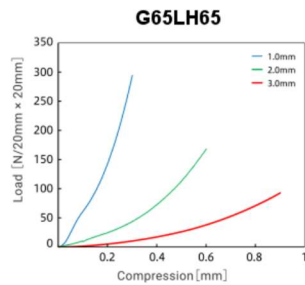
Thickness (mm)	Thermal Resistance (W/°C)		
	Compression Rate 10%	20%	30%
0.5	0.47	0.41	0.35
1.0	1.06	0.89	0.71
2.0	2.22	1.99	1.77
3.0	3.11	2.77	2.44



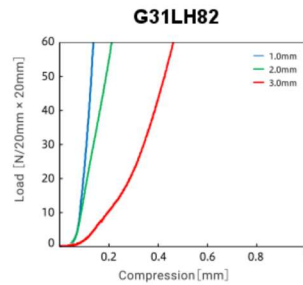
Thickness (mm)	Thermal Resistance (W/°C)		
	Compression Rate 10%	20%	30%
0.5	0.23	0.18	0.14
1.0	1.11	0.96	0.81
2.0	2.34	2.07	1.80
3.0	3.38	2.98	2.58



Thickness (mm)	Thermal Resistance (W/°C)		
	Compression Rate 10%	20%	30%
0.5	0.14	0.1	0.06
1.0	0.46	0.39	0.32
2.0	1.11	0.97	0.82
3.0	1.77	1.55	1.33



Thickness (mm)	Thermal Resistance (W/°C)		
	Compression Rate 10%	20%	30%
1.0	0.65	0.58	0.51
2.0	1.02	0.91	0.81
3.0	1.69	1.54	1.39



Thickness (mm)	Thermal Resistance (W/°C)		
	Compression Rate 10%	20%	30%
1.0	0.26	0.2	0.15
2.0	1.04	0.9	0.75
3.0	1.29	1.19	1.09

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