

Max-Therm Thermal Interface material -Thermal Pad

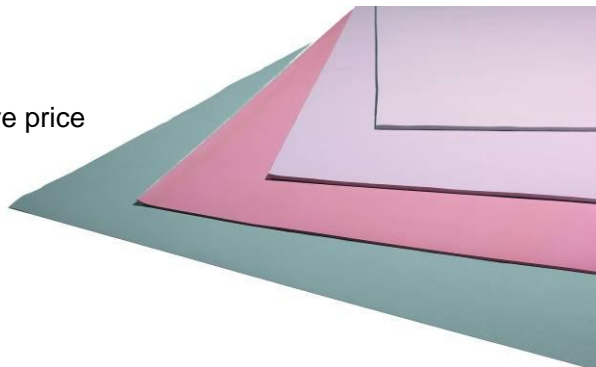
GP2000 series

General Usage:

GP2000 is a ceramic particles filled silicone rubber, which is good balance for thermal performance with competitive price and providing 1.2W thermal conductivity. It is used between heat sink and heat generating components. Its ultra soft proper enable filling air voids and rugged surface, and wetting out matting surfaces in order to efficiently transfer heat from components to heat sink

Benefit:

- Continuous roll package rubber
- General Thermal conductivity with competitive price
- Ultra soft, highly compressible
- Good wetting
- Self tacky or additional PSA if required



Typical Applications:

- Information products
- BGA
- Power module

Typical Properties:

GP2000 series	Test method	GP2100	GP2150	GP2200	GP2250	GP2300	GP2500
Construction & Composition		Silicone	Silicone	Silicone	Silicone	Silicone	Silicone
Color		Blue	Blue	Blue	Blue	Blue	Blue
Thickness (mm)		1	1.5	2	2.5	3	5
Thickness Tolerance (mm)		±10%	±10%	±10%	±10%	±10%	±10%
Density (g/cc)		2.60	2.60	2.60	2.60	2.60	2.60
Hardness (Shore 00)	ASTM D 2240	30-35	30-35	30-35	30-35	30-35	30-35
Tensile Strength	ASTM D 638	65 psi	65 psi	65 psi	65 psi	65 psi	65 psi
Elongation (%)	ASTM D 412	56	56	56	56	56	56
Outgassing TML *Post Cured (%)	ASTM E 595	0.07	0.07	0.07	0.07	0.07	0.07
Outgassing CVCm *Post Cured (%)		0.05	0.05	0.05	0.05	0.05	0.05
UL Rating		94V0	94V0	94V0	94V0	94V0	94V0
Continuous Use Temp (°C)	TGA+DMA	-40~200	-40~200	-40~200	-40~200	-40~200	-40~200
Thermal Conductivity (W/mk)	ASTM 5470/E 1530	1.2	1.2	1.2	1.2	1.2	1.2
Thermal Impedance @10psi (°C-in²/W)		1.57	2.04	2.48	2.91	3.17	4.51
@69KPa(°C-cm²/W)		10.13	13.20	16.10	18.85	20.45	28.93
Thermal Expansion (ppm/C)		150	150	150	150	150	150
Dielectric Strength (Volts)		>7,000	>7,000	>7,000	>7,000	>7,000	>7,000
Volume Resistivity (ohm-cm)	ASTM D 257	2×10 ¹³	2×10 ¹³	2×10 ¹³	2×10 ¹³	2×10 ¹³	2×10 ¹³
Dielectric Constant @1MHz	ASTM D 150	5.85	5.85	5.85	5.85	5.85	5.85

TennVac Inc. (Taiwan)
Tel: +886 2 26951213
Fax: +886 226951187
Email: sales@tennvac.com

TennVac Technology (Shenzhen) Co. Ltd
Tel: +86 755 26951701
Fax: +86 755 26952411
Email: sales@tennvac.com

TennMax Electronic Material (Kunshan) Co. Ltd
Tel: +86 512 57603910
Fax: +86 512 57603915
Email: sales@tennvac.com

TennMax America Inc.
Tel: +1 (360) 5463824
Fax: +1 (360) 5668088
Email: jeff@tennmaxusa.com

Thin series						
GP2000 series	Test method	GP2013	GP2025	GP2030	GP2050	GP2075
Construction & Composition		Silicone	Silicone	Silicone	Silicone	Silicone
Color		Blue	Blue	Blue	Blue	Blue
Thickness (mm)		0.13	0.25	0.3	0.5	0.75
Thickness Tolerance (mm)		±10%	±10%	±10%	±10%	±10%
Density (g/cc)		2.60	2.60	2.60	2.60	2.60
Hardness (Shore OO)	ASTM D 2240	65	65	45	45	45
Tensile Strength	ASTM D 638	N/A	N/A	65 psi	65 psi	65 psi
Elongation (%)	ASTM D 412	N/A	N/A	56	56	56
Outgassing TML *Post Cured (%)	ASTM E 595	0.07	0.07	0.07	0.07	0.07
Outgassing CVCM *Post Cured (%)		0.05	0.05	0.05	0.05	0.05
UL Rating		94V0	94V0	94V0	94V0	94V0
Continuous Use Temp (°C)	TGA+DMA	-40~200	-40~200	-40~200	-40~200	-40~200
Thermal Conductivity (W/mk)	ASTM 5470/E 1530	1.2	1.2	1.2	1.2	1.2
Thermal Impedance @10psi (°C-in²/W)		0.33	0.50	0.60	0.80	1.19
@69KPa(°C-cm²/W)		2.10	3.18	3.83	5.13	7.63
Thermal Expansion (ppm/C)		150	150	150	150	150
Dielectric Strength (Volts)		>7,000	>7,000	>7,000	>7,000	>7,000
Volume Resistivity (ohm-cm)	ASTM D 257	2×10 ¹³	2×10 ¹³	2×10 ¹³	2×10 ¹³	2×10 ¹³
Dielectric Constant @1MHz	ASTM D 150	5.85	5.85	5.85	5.85	5.85

Thin series with Glass fabric						
GP2000G series	Test method	GP2013g	GP2025g	GP2030g	GP2050g	GP2075g
Construction & Composition		Silicone	Silicone	Silicone	Silicone	Silicone
Color		Blue	Blue	Blue	Blue	Blue
Thickness (mm)		0.13mm	0.25mm	0.3mm	0.50mm	0.75mm
Carrier		Glass Fabric	Glass Fabric	Glass Fabric	Glass Fabric	Glass Fabric
Thickness Tolerance (mm)		±10%	±10%	±10%	±10%	±10%
Density (g/cc)		2.60	2.60	2.60	2.60	2.60
Hardness (Shore OO)	ASTM D 2240	65	65	45	45	45
Tensile Strength	ASTM D 638	N/A	N/A	130psi	130psi	130psi
Elongation (%)	ASTM D 412	N/A	N/A	28	28	28
Outgassing TML *Post Cured (%)	ASTM E 595	0.07	0.07	0.07	0.07	0.07
Outgassing CVCM *Post Cured (%)		0.05	0.05	0.05	0.05	0.05
UL Rating		94V0	94V0	94V0	94V0	94V0
Continuous Use Temp (°C)	TGA+DMA	-40~200	-40~200	-40~200	-40~200	-40~200
Thermal Conductivity (W/mk)	ASTM 5470/E 1530	1.2	1.2	1.2	1.2	1.2
Thermal Impedance @10psi (°C-in²/W)		0.35	0.51	0.62	0.82	1.20
@69KPa(°C-cm²/W)		2.23	3.25	3.95	5.15	7.65
Thermal Expansion (ppm/C)		150	150	150	150	150
Dielectric Strength (Volts)		>4,000	>5,000	>5,000	>7,000	>7,000
Volume Resistivity (ohm-cm)	ASTM D 257	2×10 ¹³	2×10 ¹³	2×10 ¹³	2×10 ¹³	2×10 ¹³
Dielectric Constant @1MHz	ASTM D 150	5.85	5.85	5.85	5.85	5.85

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