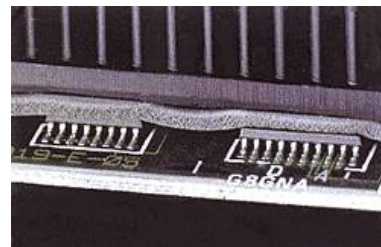
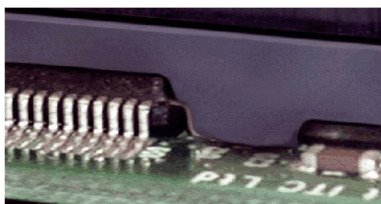


**přehled, charakteristika a aplikační využití výplňových materiálů standard:**

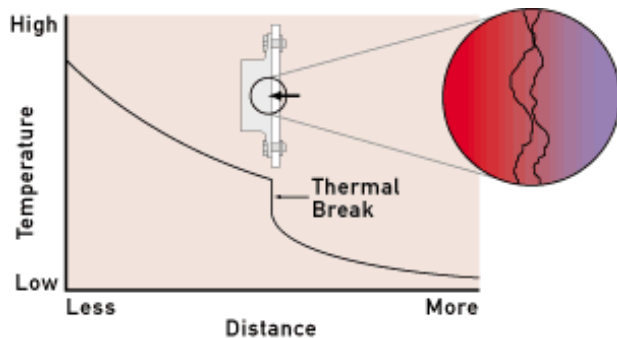
typ	aplikační použití	$C_T$ [W/m-K]	barva	$\Delta L$ [%]
GR-B	vysoká tepelná vodivost	2.360	šedá	100
GR-C	RFI, EMI (20dB RFI stínění, <1GHz)	1.20	černá	150
GR-D	všeobecné použití	1.50	tmavě šedá	100
GR-K	všeobecné použití, UL94 třída V0-V1	1.20	šedá	250
GR-L	všeobecné použití, UL94 třída V0	2.80	šedá	64
GR-M	vysoká tepelná vodivost	6.00	červeno šedá	80
XR-E	extrémně vysoká tepelná vodivost	11.00	šedá	40
XR-J	nejvyšší tepelná vodivost	14.00	šedá	40
XR-M	nový výplňový materiál s malým teplotním odporem	17.00	šedá	35
GR-F	další variace			
GR-H	další variace			
GR-HF	další variace			

$C_T$  [W/m-K] tepelná vodivost  
 $\Delta L$  [%] poměrné prodloužení

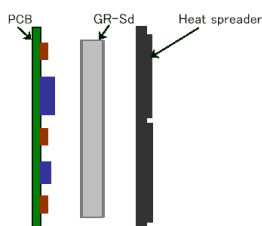
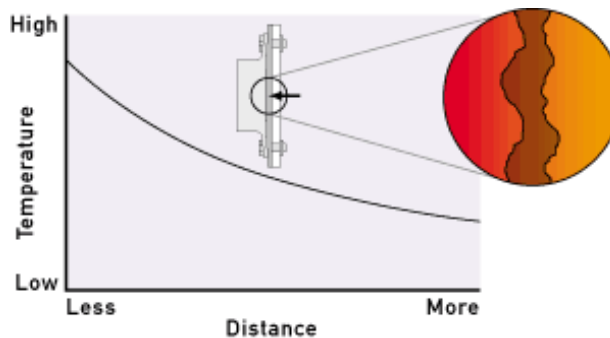


Výplňový materiál SARCON je vysoce tepelně vodivý materiál, který se snadno přizpůsobí různým tvarům pouzder. Na obr. 1 je znázorněn průstup tepla přes hladké nepřizpůsobené kontaktní plochy, které vytvoří spolehlivý tepelný kontakt. Pro zajištění spolehlivého tepelného kontaktu je nezbytné minimalizovat tepelný odpor vyplnění všech vzduchových pórů a mezer. Při použití materiálu SARCON výplň dosáhneme eliminace teplotního zlomu a získáme plynulou teplotní charakteristiku, kterou by vykazoval homogenní materiál (obr.2).

obr.1

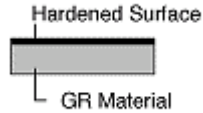
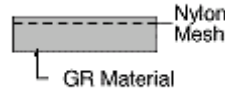
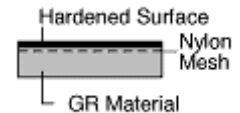


obr.2

**použité zkratky:**

$C_T$  [W/m°C] tepelná vodivost  
 $tl$  [mm] tloušťka  
 $R_{th}$  [°C/W] tepelný odpor (  $in^2 = 645,16mm^2$  )  
 $H$  [Shore 00] tvrdost (ASTM D2240)  
 $Ko10$  [Kgf/in<sup>2</sup>] komprese (10%)

$\Delta L$  [%] poměrné prodloužení  
 $U_z$  [kV≈/mm] zkušební napětí (ASTM D149)  
 $m$  [g/cm<sup>3</sup>] měrná hmotnost  
 $R_i$  [MΩ\*m] izolační odpor (ASTM D257)  
 $Ko50$  [Kgf/in<sup>2</sup>] komprese (50%)

**SARCON - výplňové materiály standard****GR série****GR-H série****GR-F série****GR-HF série**

**GR série** je základní provedení standardního výplňového materiálu SARCON. Pás se skládá z jedné vrstvy homogenního materiálu. standardní dodávky v rozměru šířka = 200mm, délka = 300mm, nestandardní rozměry na poptávku  
rozsah pracovních teplot: -60+200°C, samozhášivost: V0-V1 (UL-94V)

eries	Construction Description	Applications	"GR-B" Series	"GR-C" Series	"GR-D" Series
<b>GR SERIES</b>	General purpose silicone compound	Between chassis wall and other surface. Between semi conductor and heat sink. Large area heat transfer to heat sink. Between CPU and heat sink.	GR-B	GR-C	GR-D
<b>GR-H SERIES</b>	Same general purpose silicone compound as above plus additional hardening of the top surface to facilitate handling and installation during complete assemblies	Same as above, except hardened top surface allows handling without distortion in cases where this feature is required.	GR-HB	n/a	GR-HD
<b>GR-F SERIES</b>	Same general purpose silicone compound as above plus mesh reinforcement stiffener to prevent stretching; i.e., elongation of die-cut holes.	Same as GR basic formula, plus specific construction for intricate die-cut shapes to prevent distortion of the die-cut shape during die-cutting and installation.	n/a	n/a	GR-FD
<b>GR-HF SERIES</b>	Same general purpose silicone compound as above plus mesh reinforcement stiffener to prevent stretching; i.e., elongation of die-cut holes. additional hardening of the top surface to facilitate handling and installation during complex assemblies, and mesh reinforcement stiffener to prevent stretching; i.e., elongation of die-cut holes.	Same as GR basic formula, plus specific construction with hardened top surface and mesh reinforcement for die-cutting and handling without distortion.	n/a	n/a	GR-HFD

**SARCON - výplňové materiály standard - GR-B****GR-B**

SARCON® Thermal Gap Filler Pads are highly conformable and high heat conducting gel materials in a versatile sheet form. They easily fit and adhere to most all shapes and sizes of components, including protrusions and recessed areas. In areas where space between surfaces is uneven or varies and where surface textures are a concern regarding efficient thermal transfer, the supple consistency of the pads is excellent for filling air gaps and uneven surfaces.

typ	tl [mm]	Rth [°C/W] (in <sup>2</sup> )	barva	C <sub>T</sub> [W/m°C]	Ri [MΩ*m]	U <sub>z</sub> [kV≈/mm]	m [g/cm <sup>3</sup> ]	H [Shore 00]	ΔL [%]	Ko10 [Kgf/in <sup>2</sup> ]	Ko50 [Kgf/in <sup>2</sup> ]	poznámka
50GR-B	0.5	0.50	šedá	2.3	1.0x10 <sup>6</sup>	8	2.5	49	100	8.7	39.5	
100GR-B	1.0	0.83								11.6	38.9	
150GR-B	1.5	1.19								7.4	32.5	
200GR-B	2.0	1.40								5.0	29.2	
250GR-B	2.5	1.80								4.2	26.2	
300GR-B	3.0	2.10								3.8	21.5	
350GR-B	3.5	2.38								3.7	20.2	
400GR-B	4.0	2.58								3.8	18.5	
500GR-B	5.0	3.20								3.7	14.5	

**GR-B SERIES**

	Identifier	Test Method	50G-B	100G-B	150G-B	200G-B	250G-B	300G-B	350G-B	400G-B	500G-B
<b>Thickness</b>	mm	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	1.5 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	2.5 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3	3.5 <sup>±</sup> 0.3	4.0 <sup>±</sup> 0.4	5.0 <sup>±</sup> 0.5
Thermal Resistance	°Cin <sub>1</sub> /W	ASTM D5470 Equivalent	.50	.83	1.19	1.40	1.80	2.10	2.38	2.58	3.20
Color	Visual	Fujipoly	Gray	Gray	Gray	Gray	Gray	Gray	Gray	Gray	Gray
Thermal Conductivity	watt/mk	ASTM D5470	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30
Volume Resistivity	M Ohms · m	ASTM D257	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>
Withstand Voltage	kV/mm-AC	ASTM D149	8	8	8	8	8	8	8	8	8
<b>Specific Gravity</b>	gr/cm <sup>3</sup>	ASTM D792	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
<b>Hardness</b>	Shore 00	ASTM D2240	<49	<49	<49	<49	<49	<49	<49	<49	<49
<b>Elongation</b>	%	ASTM D412	100	100	100	100	100	100	100	100	100
<b>10% Compression</b>	Kgf/in <sub>1</sub>	Fujipoly	8.7	11.6	7.4	5.0	4.2	3.8	3.7	3.8	3.7
<b>50% Compression</b>	Kgf/in <sub>1</sub>		84.8	76.0	64.2	60.1	55.2	43.8	41.2	38.7	30.1
<b>Sustain 50% Compression</b>			39.5	38.9	32.5	29.2	26.2	21.5	20.2	18.5	14.5

**GR-HB SERIES**

	Identifier	Test Method	50G-HB	100G-HB	150G-HB	200G-HB	250G-HB	300G-HB	350G-HB	400G-HB	500G-HB
<b>Thickness</b>	mm	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	1.5 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	2.5 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3	3.5 <sup>±</sup> 0.3	4.0 <sup>±</sup> 0.4	5.0 <sup>±</sup> 0.5
Thermal Resistance	°Cin <sub>1</sub> /W	ASTM D5470 Equivalent	.55	.92	1.30	1.59	2.07	2.17	2.40	2.59	3.31
Color	Visual	Fujipoly	Gray	Gray	Gray	Gray	Gray	Gray	Gray	Gray	Gray
Thermal Conductivity	watt/mk	ASTM D5470	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30
Volume Resistivity	M Ohms · m	ASTM D257	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>
Withstand Voltage	kV/mm-AC	ASTM D149	8	8	8	8	8	8	8	8	8
<b>Specific Gravity</b>	gr/cm <sup>3</sup>	ASTM D792	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
<b>Hardness</b>	Shore A	ASTM D2240	<49	<49	<49	<49	<49	<49	<49	<49	<49
<b>Elongation</b>	%	ASTM D412	80	80	80	80	80	80	80	80	80
<b>10% Compression</b>	Kgf/in <sub>1</sub>	Fujipoly	13.5	13.4	10.8	7.9	6.5	6.2	6.1	5.5	4.8
<b>50% Compression</b>	Kgf/in <sub>1</sub>		103.6	97.2	89.6	75.2	67.8	52.4	47.6	42.1	33.1
<b>Sustain 50% Compression</b>	Kgf/in <sub>1</sub>		64.6	58.2	44.9	31.1	26.0	24.1	21.2	20.1	17.0

**SARCON - výplňové materiály standard - GR-C****GR-C**

SARCON® Thermal Gap Filler Pads are highly conformable and high heat conducting gel materials in a versatile sheet form. They easily fit and adhere to most all shapes and sizes of components, including protrusions and recessed areas.

In areas where space between surfaces is uneven or varies and where surface textures are a concern regarding efficient thermal transfer, the supple consistency of the pads is excellent for filling air gaps and uneven surfaces.

typ	tl [mm]	Rth [°C/W] (in <sup>2</sup> )	barva	C <sub>T</sub> [W/m°C]	Ri [MΩ*m]	U <sub>z</sub> [kV≈/mm]	m [g/cm <sup>3</sup> ]	H [Shore 00]	ΔL [%]	Ko10 [Kgf/in <sup>2</sup> ]	Ko50 [Kgf/in <sup>2</sup> ]	poznámka
100GR-C	1.0	1.24	černá	1.2	1.0x10 <sup>5</sup>	14	2.8	52	150	16.5	32.6	RFI stínění (10MHz+1GHz) 20dB
200GR-C	2.0	2.06								9.5	30.0	
300GR-C	3.0	3.27								3.1	21.8	

**GR-C SERIES**

	Identifier	Test Method	100G-C	200G-C	300G-C
<b>Thickness</b>	mm	Fujipoly	1.0 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	2.0 <sup>±</sup> 0.3
<b>Thermal Resistance</b>	°Cin <sub>1</sub> /W	ASTM D5470 Equivalent	1.24	2.06	3.27
<b>Color</b>	Visual	Fujipoly	Black	Black	Black
<b>Thermal Conductivity</b>	watt/mk	ASTM D5470	1.20	1.20	1.20
<b>Volume Resistivity</b>	M Ohms · m	ASTM D257	1.0x10 <sup>5</sup>	1.0x10 <sup>5</sup>	1.0x10 <sup>5</sup>
<b>Withstand Voltage</b>	kV/mm-AC	ASTM D149	14	14	14
<b>Specific Gravity</b>	gr/cm <sup>3</sup>	ASTM D792	2.8	2.8	2.8
<b>Hardness</b>	Shore 00	ASTM D2240	<52	<52	<52
<b>Elongation</b>	%	ASTM D412	150	150	150
<b>10% Compression</b>	Kgf/in <sub>1</sub>	Fujipoly	16.5	9.5	3.1
<b>50% Compression</b>	Kgf/in <sub>1</sub>		68.0	60.0	37.7

**SARCON - výplňové materiály standard - GR-D****GR-D**

SARCON® Thermal Gap Filler Pads are highly conformable and high heat conducting gel materials in a versatile sheet form. They easily fit and adhere to most all shapes and sizes of components, including protrusions and recessed areas.

In areas where space between surfaces is uneven or varies and where surface textures are a concern regarding efficient thermal transfer, the supple consistency of the pads is excellent for filling air gaps and uneven surfaces.

typ	tl [mm]	Rth [°C/W] (in <sup>2</sup> )	barva	C <sub>T</sub> [W/m°C]	Ri [MΩ*m]	U <sub>z</sub> [kV≈/mm]	m [g/cm <sup>3</sup> ]	H [Shore 00]	ΔL [%]	Ko10 [Kgf/in <sup>2</sup> ]	Ko50 [Kgf/in <sup>2</sup> ]	poznámka
50GR-D	0.5	0.57	tmavě šedá	1.5	1.0x10 <sup>6</sup>	14	2.6	49	100	13.0	40.2	
100GR-D	1.0	1.02								12.5	39.2	
150GR-D	1.5	1.45								11.5	33.1	
200GR-D	2.0	1.71								10.2	30.9	
250GR-D	2.5	2.11								7.7	27.2	
300GR-D	3.0	2.34								6.1	24.7	
350GR-D	3.5	2.59								5.6	23.5	
400GR-D	4.0	2.79								4.9	20.3	
500GR-D	5.0	3.30								4.2	15.8	

**GR-D SERIES**

	Identifier	Test Method	50G-D	100G-D	150G-D	200G-D	250G-D	300G-D	350G-D	400G-D	500G-D
<b>Thickness</b>	mm	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	1.5 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	2.5 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3	3.5 <sup>±</sup> 0.3	4.0 <sup>±</sup> 0.4	5.0 <sup>±</sup> 0.5
<b>Thermal Resistance</b>	°Cin <sub>1</sub> /W	ASTM D5470 Equivalent	.57	1.02	1.45	1.71	2.11	2.34	2.59	2.79	3.30
<b>Color</b>	Visual	Fujipoly	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray
<b>Thermal Conductivity</b>	watt/mk	ASTM D5470	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
<b>Volume Resistivity</b>	M Ohms · m	ASTM D257	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>
<b>Withstand Voltage</b>	kV/mm-AC	ASTM D149	14	14	14	14	14	14	14	14	14
<b>Specific Gravity</b>	gr/cm <sup>3</sup>	ASTM D792	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
<b>Hardness</b>	Shore 00	ASTM D2240	<49	<49	<49	<49	<49	<49	<49	<49	<49
<b>Elongation</b>	%	ASTM D412	100	100	100	100	100	100	100	100	100
<b>10% Compression</b>	Kgf/in <sub>1</sub>	Fujipoly	13.0	12.5	11.5	10.2	7.7	6.1	5.6	4.9	4.2
<b>50% Compression</b>	Kgf/in <sub>1</sub>		86.1	76.8	67.7	64.6	58.8	45.2	43.1	40.8	35.1
<b>Sustain 50% Compression</b>	Kgf/in <sub>1</sub>		40.2	39.2	33.1	30.9	27.2	24.7	23.5	20.3	15.8.2010

**GR-HD SERIES**

	Identifier	Test Method	50G-HD	100G-HD	150G-HD	200G-HD	250G-HD	300G-HD	350G-HD	400G-HD	500G-HD
<b>Thickness</b>	mm	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	1.5 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	2.5 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3	3.5 <sup>±</sup> 0.3	4.0 <sup>±</sup> 0.4	5.0 <sup>±</sup> 0.5
<b>Thermal Resistance</b>	°Cin <sub>1</sub> /W	ASTM D5470 Equivalent	.63	1.10	1.59	1.94	2.24	2.54	2.63	2.88	3.32
<b>Color</b>	Visual	Fujipoly	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray
<b>Thermal Conductivity</b>	watt/mk	ASTM D5470	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
<b>Volume Resistivity</b>	M Ohms · m	ASTM D257	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>
<b>Withstand Voltage</b>	kV/mm-AC	ASTM D149	13	13	13	13	13	13	13	13	13
<b>Specific Gravity</b>	gr/cm <sup>3</sup>	ASTM D792	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
<b>Hardness</b>	Shore 00	ASTM D2240	<49	<49	<49	<49	<49	<49	<49	<49	<49
<b>Elongation</b>	%	ASTM D412	80	80	80	80	80	80	80	80	80
<b>10% Compression</b>	Kgf/in <sub>1</sub>	Fujipoly	20.9	19.8	15.2	12.3	10.9	8.0	6.9	5.7	5
<b>50% Compression</b>	Kgf/in <sub>1</sub>		135.6	121.7	115.0	98.1	83.0	68.1	65.2	60.1	52.1
<b>Sustain 50% Compression</b>	Kgf/in <sub>1</sub>	Fujipoly	106.9	91.6	59.8	33.4	28.1	25.2	24.7	23.1	20.1

**SARCON - výplňové materiály standard - GR-K****GR-K**

Sarcon® Thermal Gap Filler Pads are highly conformable and high heat conducting gel materials in a versatile sheet form. They easily fit and adhere to most all shapes and sizes of components, including protrusions and recessed areas.

In areas where space between surfaces is uneven or varies and where surface textures are a concern regarding efficient thermal transfer, the supple consistency of the pads is excellent for filling air gaps and uneven surfaces.

typ	tl [mm]	Rth [°C/W] (in <sup>2</sup> )	barva	C <sub>T</sub> [W/m°C]	Ri [MΩ*m]	U <sub>z</sub> [kV≈/mm]	m [g/cm <sup>3</sup> ]	H [Shore 00]	ΔL [%]	Ko10 [Kgf/in <sup>2</sup> ]	Ko50 [Kgf/in <sup>2</sup> ]	poznámka
50GR-K	0.5	0.90	šedá	1.2	4.2x10 <sup>5</sup>	16	2.3	48	250	10.0	47.0	
100GR-K	1.0	1.42								13.0	40.0	
200GR-K	2.0	2.34								11.0	37.0	
300GR-K	3.0	3.26								6.0	30.0	

**GR-K**

	Identifier	Test Method	50G-K	100G-K	200G-K	300G-K
Thickness	mm	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3
Thermal Resistance	°Cin <sub>1</sub> /W	FTM P-3020 (ASTM D5470 Equivalent)	.90	1.42	2.34	3.26
Color	Visual	Fujipoly			Gray	
Thermal Conductivity	watt/mk	FTMP-1620 (ASTM D2326 Equivalent)			1.20	
Volume Resistivity	M Ohms · m	ASTM D257			4.20x10 <sup>4</sup>	
Withstand Voltage	kV/mm-AC	ASTM D149			16	
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792			2.3	
Hardness	Shore 00	ASTM D2240			48	
Elongation	%	ASTM D412			250	
10% Compression	Kgf/in <sub>1</sub>	Fujipoly	10.0	13.0	11.0	6.0
Sustain 50% Compression	Kgf/in <sub>1</sub>	Fujipoly	47.0	40.0	37.0	30.0

**GR-HK**

	Identifier	Test Method	50G-HK	100G-HK	200G-HK	300G-HK
Thickness	mm	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3
Thermal Resistance	°Cin <sub>1</sub> /W	FTM P-3020 (ASTM D5470 Equivalent)	.90	1.52	2.45	3.26
Color	Visual	Fujipoly			Gray	
Thermal Conductivity	watt/mk	FTMP-1620 (ASTM D2326 Equivalent)			1.20	
Volume Resistivity	M Ohms · m	ASTM D257			4.20x10 <sup>4</sup>	
Withstand Voltage	kV/mm-AC	ASTM D149			17	
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792			2.3	
Hardness	Shore 00	ASTM D2240			48	
Elongation	%	ASTM D412			200	
10% Compression	Kgf/in <sub>1</sub>	Fujipoly	13.0	18.0	12.0	6.0
Sustain 50% Compression	Kgf/in <sub>1</sub>	Fujipoly	60.0	78.0	45.0	39.0

**SARCON - výplňové materiály standard - GR-L****GR-L**

SARCON® Thermal Gap Filler Pads are highly conformable and high heat conducting gel materials in a versatile sheet form. They easily fit and adhere to most all shapes and sizes of components, including protrusions and recessed areas.

In areas where space between surfaces is uneven or varies and where surface textures are a concern regarding efficient thermal transfer, the supple consistency of the pads is excellent for filling air gaps and uneven surfaces.

typ	tl [mm]	Rth [°C/W] (in <sup>2</sup> )	barva	C <sub>T</sub> [W/m°C]	Ri [MΩ*m]	U <sub>z</sub> [kV≈/mm]	m [g/cm <sup>3</sup> ]	H [Shore 00]	ΔL [%]	Ko10 [Kgf/in <sup>2</sup> ]	Ko50 [Kgf/in <sup>2</sup> ]	poznámka
50GR-L	0.5	0.42	šedá	2.8	2.5x10 <sup>4</sup>	13	2.7	53	64	12.0	52.0	
100GR-L	1.0	0.76								11.0	44.0	
200GR-L	2.0	1.20								6.0	40.0	
300GR-L	3.0	1.68								5.0	35.0	

**GR-L**

	Identifier	Test Method	50G-L	100G-L	200G-L	300G-L
Thickness	mm	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3
Thermal Resistance	°Cin <sub>W</sub>	FTM P-3020 (ASTM D5470 Equivalent)	.42	.76	1.20	3.26
Color	Visual	Fujipoly			Gray	
Thermal Conductivity	watt/mk	FTMP-1620 (ASTM D2326 Equivalent)			2.8	
Volume Resistivity	M Ohms · m	ASTM D257			2.5x10 <sup>4</sup>	
Withstand Voltage	kV/mm-AC	ASTM D149			13	
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792			2.7	
Hardness	Shore 00	ASTM D2240			53	
Elongation	%	ASTM D412			64	
10% Compression	Kgf/in <sub>2</sub> @ 10%	Fujipoly	12.0	11.0	6.0	6.0
Sustain 50% Compression	Kgf/in <sub>2</sub> @ 10%	Fujipoly	52.0	44.0	40.0	30.0

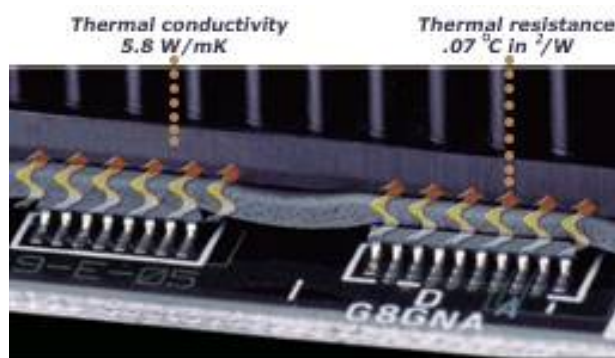
**GR-HL**

	Identifier	Test Method	50G-HL	100G-HL	200G-HL	300G-HL
Thickness	mm	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3
Thermal Resistance	°Cin <sub>W</sub>	FTM P-3020 (ASTM D5470 Equivalent)	.59	.93	1.41	1.88
Color	Visual	Fujipoly			Gray	
Thermal Conductivity	watt/mk	FTMP-1620 (ASTM D2326 Equivalent)			2.8	
Volume Resistivity	M Ohms · m	ASTM D257			2.4x10 <sup>4</sup>	
Withstand Voltage	kV/mm-AC	ASTM D149			75	
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792			2.7	
Hardness	Shore 00	ASTM D2240			53	
Elongation	%	ASTM D412			32	
10% Compression	Kgf/in <sub>2</sub>	Fujipoly	18.0	16.0	9.0	7.0
Sustain 50% Compression	Kgf/in <sub>2</sub>	Fujipoly	97.0	92.0	55.0	45.0

**SARCON - výplňové materiály standard - GR-M****GR-M**

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typ	tl [mm]	Rth [°C/W] (in²)	barva	C <sub>T</sub> [W/m°C]	R <sub>i</sub> [MΩ*m]	U <sub>z</sub> [kV≈/mm]	m [g/cm³]	H [Shore 00]	ΔL [%]	Ko10 [Kg/in²]	Ko50 [Kg/in²]	poznámka
50GR-M	0.5	0.21	tmavě červeno šedá	6.0	1.3x10 <sup>6</sup>	13	3.2	52	80	8.5	53.7	
100GR-M	1.0	0.32								10.7	50.6	
150GR-M	1.5	0.48								8.4	46.5	
200GR-M	2.0	0.64								8.1	39.5	
250GR-M	2.5	0.75								7.0	38.5	
300GR-M	3.0	0.84								5.7	30.2	

**Variation: GR-M**

	Identifier	Test Method	50G-M	100G-M	150G-M	200G-M	250G-M	300G-M
Thickness	mm	Fujipoly	0.5 <sup>±0.1</sup>	1.0 <sup>±0.2</sup>	1.5 <sup>±0.2</sup>	2.0 <sup>±0.3</sup>	2.5 <sup>±0.3</sup>	3.0 <sup>±0.3</sup>
Thermal Resistance	°Cin <sub>2</sub> /W	ASTM D5470 Equivalent	.21	.32	.48	.64	.75	.84
Color	Visual	Fujipoly	Dark Reddish Gray	Dark Reddish Gray	Dark Reddish Gray	Dark Reddish Gray	Dark Reddish Gray	Dark Reddish Gray
Thermal Conductivity	watt/mk	ASTM D5470	6.0	6.0	6.0	6.0	6.0	6.0
Volume Resistivity	M Ohms · m	ASTM D257	1.3 x 10 <sup>6</sup>	1.3 x 10 <sup>6</sup>	1.3 x 10 <sup>6</sup>	1.3 x 10 <sup>6</sup>	1.3 x 10 <sup>6</sup>	1.3 x 10 <sup>6</sup>
Withstand Voltage	kV/mm·AC	ASTM D149	13	13	13	13	13	13
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792	3.2	3.2	3.2	3.2	3.2	3.2
Hardness	Shore 00	ASTM D2240	< 52	< 52	< 52	< 52	< 52	< 52
Elongation	%	ASTM D412	80	80	80	80	80	80
10% Compression	Kgf/in <sub>2</sub>	Fujipoly	8.5	10.7	8.4	8.1	7.0	5.7
50% Compression	Kgf/in <sub>2</sub>	Fujipoly	90.5	87.3	84.1	76.8	70.8	62.0
Sustain 50% Compression	Kgf/in <sub>2</sub>	Fujipoly	53.7	50.6	46.5	39.5	38.5	30.2

**Variation: GR-HM**

	Identifier	Test Method	50G-HM	100G-HM	150G-HM	200G-HM	250G-HM	300G-HM
Thickness	mm	Fujipoly	0.5 <sup>±0.1</sup>	< FONT>1.0 <sup>±0.2</sup> 2	1.5 <sup>±0.2</sup>	2.0 <sup>±0.3</sup>	2.5 <sup>±0.3</sup>	<3.0 <sup>±0.3</sup>
Thermal Resistance	°Cin <sub>2</sub> /W	<ASTM D5470 Equivalent	<0.27	<0.45	<0.58	0.75	0.84	<0.92
Color	Visual	Fujipoly	Dark Reddish Gray	Dark Reddish Gray	Dark Reddish Gray	Dark Reddish Gray	Dark Reddish Gray	Dark Reddish Gray
Thermal Conductivity	watt/mk	ASTM D5470	6.0	6.0	6.0	6.0	6.0	6.0
Volume Resistivity	M Ohms · m	<ASTM D257	1.0x10 <sup>5</sup>	1.0x10 <sup>5</sup>	1.0x10 <sup>5</sup>	1.0x10 <sup>5</sup>	1.0x10 <sup>5</sup>	1.0x10 <sup>5</sup>
Withstand Voltage	kV·AC	<ASTM D149	<13	<13	<13	13	13	<13
Specific Gravity	gr/cm <sup>3</sup>	<ASTM D792	<3.2	<3.2	<3.2	3.2	3.2	<3.2
Hardness	Shore 00	ASTM D2240	<52	<52	<52	<52	<52	<52
Elongation	%	ASTM D412	80	80	80	80	80	80
10% Compression	Kgf/in <sub>2</sub>	<Fujipoly	<13.9	<15.6	<14.6	9.3	9.5	<8.3
Sustain 50% Compression	Kgf/in <sub>2</sub>	<Fujipoly	<76.6	<74.6	<88.8	54.2	50.3	<42.5



**SARCON - výplňové materiály standard - XR-E****XR-E**

SARCON® Thermal Gap Filler Pads are highly conformable and high heat conducting gel materials in a versatile sheet form. They easily fit and adhere to most all shapes and sizes of components, including protrusions and recessed areas.

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typ	tl [mm]	Rth [°C/W] (in <sup>2</sup> )	barva	C <sub>T</sub> [W/m°C]	Ri [MΩ*m]	U <sub>z</sub> [kV≈/mm]	m [g/cm <sup>3</sup> ]	H [Shore 00]	ΔL [%]	Ko10 [Kgf/in <sup>2</sup> ]	Ko50 [Kgf/in <sup>2</sup> ]	poznámka
100XR-E	1.0	0.20	šedá	11.0	7.0x11 <sup>3</sup>	11	3.3	64	40	8.6	81.5	
150XR-E	1.5	0.24								10.0	79.3	
200XR-E	2.0	0.32								9.5	78.7	

**XR-E**

	Identifier	Test Method	100XR-e	150XR-e	200XR-e
Thickness	mm	Fujipoly	1.0mm±0.2	1.5mm±0.2	2.0mm±0.3
Thermal Resistance	°Cin <sub>1</sub> /W	ASTM D5470 Equivalent	.20	.24	.32
Color	Visual	Fujipoly	Gray	Gray	Gray
Thermal Conductivity	watt/mk	ASTM D5470	11.0	11.0	11.0
Volume Resistivity	M Ohms · m	ASTM D257	7.0 x 10 <sup>3</sup>	7.0 x 10 <sup>3</sup>	7.0 x 10 <sup>3</sup>
Withstand Voltage	kV/mm·AC	ASTM D149	11	11	11
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792	3.3	3.3	3.3
Hardness	Shore 00	ASTM D2240	<64	<64	<64
Elongation	%	ASTM D412	40	40	40
10% Compression	Kgf/in <sub>1</sub>	Fujipoly	8.6	10.0	9.5
50% Compression	Kgf/in <sub>1</sub>	Fujipoly	126.1	123.4	121.4
Sustain 50% Compression	Kgf/in <sub>1</sub>	Fujipoly	81.5	79.3	78.7

**XR-HE**

	Identifier	Test Method	30XR-He *	50XR-He	100XR-He	150XR-He	200XR-He
Thickness	mm	Fujipoly	0.30mm±0.1	0.50mm±0.1	1.0mm±0.2	1.5mm±0.2	2.0mm±0.3
Thermal Resistance	°Cin <sub>1</sub> /W	ASTM D5470 Equivalent	.11	.16	.23	.27	.35
Color	Visual	Fujipoly	Gray	Gray	Gray	Gray	Gray
Thermal Conductivity	watt/mk	ASTM D5470	11.0	11.0	11.0	11.0	11.0
Volume Resistivity	M Ohms · m	ASTM D257	7.0 x 10 <sup>3</sup>	7.0 x 10 <sup>3</sup>	7.0 x 10 <sup>3</sup>	7.0 x 10 <sup>3</sup>	7.0 x 10 <sup>3</sup>
Withstand Voltage	kV/mm·AC	ASTM D149	11	11	11	11	11
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792	3.3	3.3	3.3	3.3	3.3
Hardness	Shore 00	ASTM D2240	<64	<64	<64	<64	<64
Elongation	%	ASTM D412	40	40	40	40	40
10% Compression	Kgf/in <sub>1</sub>	Fujipoly	2.4	5.9	10.2	10.1	11.5
50% Compression	Kgf/in <sub>1</sub>	Fujipoly	59.6	131.2	129.6	126.2	125.5
Sustain 50% Compression	Kgf/in <sub>1</sub>	Fujipoly	52.5	88.3	86.4	84.3	80.3

**SARCON - výplňové materiály standard - XR-J****XR-J**

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typ	tl [mm]	Rth [°C/W] (in <sup>2</sup> )	barva	C <sub>T</sub> [W/m°C]	Ri [MΩ*m]	U <sub>z</sub> [kV≈/mm]	m [g/cm <sup>3</sup> ]	H [Shore 00]	ΔL [%]	Ko10 [Kgf/in <sup>2</sup> ]	Ko50 [Kgf/in <sup>2</sup> ]	poznámka
100XR-J	1.0	0.17	šedá	14.0	7.3x10 <sup>3</sup>	11	3.2	64	40	10.5	79.4	
150XR-J	1.5	0.21								12.5	78.3	
200XR-J	2.0	0.29								13.5	72.8	

**XR-J**

	Identifier	Test Method	100XR-j	150XR-j	200XR-j
Thickness	mm	Fujipoly	1.0mm±0.2	1.5mm±0.2	2.0mm±0.3
Thermal Resistance	°Cin <sub>1</sub> /W	ASTM D55470 Equivalent	.17	.21	.29
Color	Visual	Fujipoly	Gray	Gray	Gray
Thermal Conductivity	watt/mk	ASTM D5470	14.0	14.0	14.0
Volume Resistivity	M Ohms · m	ASTM D257	7.3 x 10 <sup>3</sup>	7.3 x 10 <sup>3</sup>	7.3 x 10 <sup>3</sup>
Withstand Voltage	kV/mm·AC	ASTM D149	11	11	11
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792	3.2	3.2	3.2
Hardness	Shore 00	ASTM D2240	<64	<64	<64
Elongation	%	ASTM D412	40	40	40
10% Compression	Kgf/in <sub>1</sub>	Fujipoly	10.5	12.5	13.5
50% Compression	Kgf/in <sub>1</sub>	Fujipoly	123.4	125.7	121.8
Sustain 50% Compression	Kgf/in <sub>1</sub>	Fujipoly	79.4	78.3	72.8

**XR-HJ**

	Identifier	Test Method	30XR-Hj *	50XR-Hj	100XR-Hj	150XR-Hj	200XR-Hj
Thickness	mm	Fujipoly	0.30mm±0.1	0.50mm±0.1	1.0mm±0.2	1.5mm±0.2	2.0mm±0.3
Thermal Resistance	°Cin <sub>1</sub> /W	ASTM D55470 Equivalent	.09	.14	.20	.25	.34
Color	Visual	Fujipoly	Gray	Gray	Gray	Gray	Gray
Thermal Conductivity	watt/mk	ASTM D5470	14.0	14.0	14.0	14.0	14.0
Volume Resistivity	M Ohms · m	ASTM D257	7.3 x 10 <sup>3</sup>	7.3 x 10 <sup>3</sup>	7.3 x 10 <sup>3</sup>	7.3 x 10 <sup>3</sup>	7.3 x 10 <sup>3</sup>
Withstand Voltage	kV/mm·AC	ASTM D149	11	11	11	11	11
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792	3.2	3.2	3.2	3.2	3.2
Hardness	Shore 00	ASTM D2240	<64	<64	<64	<64	<64
Elongation	%	ASTM D412	40	40	40	40	40
10% Compression	Kgf/in <sub>1</sub>	Fujipoly	4.6	12.6	10.5	12.6	13.2
50% Compression	Kgf/in <sub>1</sub>	Fujipoly	64.4	130.4	130.5	131.5	128.5
Sustain 50% Compression	Kgf/in <sub>1</sub>	Fujipoly	60.3	89.4	82.1	79.2	75.6

**SARCON - výplňové materiály standard - XR-M****XR-M**

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typ	tl [mm]	Rth [°C/W] (in <sup>2</sup> )	barva	C <sub>T</sub> [W/m°C]	Ri [MΩ*m]	U <sub>z</sub> [kV≈/mm]	m [g/cm <sup>3</sup> ]	H [Shore 00]	ΔL [%]	Ko10 [Kgf/in <sup>2</sup> ]	Ko50 [Kgf/in <sup>2</sup> ]	poznámka
30XR-M	0.3	0.07	šedá	17.0	1x10 <sup>5</sup>	0.5	3.2	80	35	4.0	63.0	
50XR-M	1.0	0.10								4.0	90.0	

**XR-M**

	Identifier	Test Method	30XR-m	50XR-m * (30X-m, 50X-m max. W & L = 50mm)
Thickness	mm	Fujipoly	0.3 <sup>±</sup> 0.1	0.5 <sup>±</sup> 0.2
Thermal Resistance	°Cin <sub>1</sub> /W	FTM P-3020 (ASTM D5470 Equivalent)	.07	.10
Color	Visual	Fujipoly		Gray
Thermal Conductivity	watt/mk	FTMP-1620 (ASTM D2326 Equivalent)		17.0
Volume Resistivity	M Ohms · m	ASTM D257		1x10 <sup>5</sup>
Withstand Voltage	kV/mm·AC	ASTM D149		.5
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792		3.2
Hardness	Shore 00	ASTM D2240		80
Elongation	%	ASTM D412		35
10% Compression	Kgf/in <sub>1</sub> @ 10%	Fujipoly	4.0	4.0
Sustain 50% Compression	Kgf/in <sub>1</sub> @ 10%	Fujipoly	63.0	90.0

**XRH-M**

	Identifier	Test Method	100XR-Hm	150XR-Hm	200XR-Hm
Thickness	mm	Fujipoly	1.0 <sup>±</sup> 0.1	1.5 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.2
Thermal Resistance	°Cin <sub>1</sub> /W	FTM P-3020 (ASTM D5470 Equivalent)	.14	.19	.24
Color	Visual	Fujipoly	Gray		
Thermal Conductivity	watt/mk	FTMP-1620 (ASTM D2326 Equivalent)	17.0		
Volume Resistivity	M Ohms · m	ASTM D257	1x10 <sup>5</sup>		
Withstand Voltage	kV/mm·AC	ASTM D149	15		
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792	3.2		
Hardness	Shore 00	ASTM D2240	80		
Elongation	%	ASTM D412	35		
10% Compression	Kgf/in <sub>1</sub> @ 10%	Fujipoly	10.0	18.0	16.0
Sustain 50% Compression	Kgf/in <sub>1</sub> @ 10%	Fujipoly	66.0	55.0	44.0

**SARCON - výplňové materiály standard, GR-Fx****SARCON GR-Fx**

složení pásu: - homogenní materiál, smyčková výztuha  
standardní dodávky: - šířka < 200mm, délka < 300mm, větší rozměr na požádání

rozsah prac. teplot: -60+200°C  
samozhášivost: V0-V1 (UL-94V)

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typ	tl [mm]	Rth [°C/W] [in <sup>2</sup> ]	Ko10 [Kgf/in <sup>2</sup> ]	Ko50 [Kgf/in <sup>2</sup> ]	barva	C <sub>T</sub> [W/m <sup>2</sup> °C]	Ri [MΩ*mm]	U <sub>z</sub> [kV≈/mm]	m [g/cm <sup>3</sup> ]	H [Shore]	ΔL [%]
50GR-Fd	0.5	0.60	17.0	96.4	tmavě šedá	1.5	1.0x10 <sup>6</sup>	9	2.6	49	60
100GR-Fd	1.0	1.04	15.2	71.6							
150GR-Fd	1.5	1.57	15.4	49.9							
200GR-Fd	2.0	1.85	11.2	31.2							
250GR-Fd	2.5	2.27	8.2	25.8							
300GR-Fd	3.0	2.57	7.3	20.0							
350GR-Fd	3.5	2.63	6.5	18.9							
400GR-Fd	4.0	2.90	5.4	18.2							
500GR-Fd	5.0	3.33	4.8	17.9							

Properties	Unit	SARCON GR-F								
Extractable Volatiles	Content % Cyclodimethyl Siloxane	Fujipoly	D4~D10 <0.0010 wt%	D11~d20 <0.0043 wt%	D4~D20 <0.0043 wt%					
Continuous Use	°C	Fujipoly	-60°C to 200°C							
Flame Retardance	UL-94V Standard	UL	V0							
Dimension Available	Thickness (mm)	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	1.5 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	2.5 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3	3.5 <sup>±</sup> 0.3	4.0 <sup>±</sup> 0.3
Dimension Available	Width (mm)	Fujipoly	200 Maximum							
Dimension Available	Length (mm)	Fujipoly	300 Maximum							
Packaging	Standard	Fujipoly	Each sheet is placed between top and bottom film liners for die cutting handling ease.							

**Variation: GR-FD**

	Identifier	Test Method	50G-FD	100G-FD	150G-FD	200G-FD	250G-FD	300G-FD	350G-FD	400G-FD	500G-FD
Thickness	mm	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	1.5 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	2.5 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3	3.5 <sup>±</sup> 0.3	4.0 <sup>±</sup> 0.4	5.0 <sup>±</sup> 0.5
Thermal Resistance	°Cin <sub>1</sub> /W	ASTM D5470 Equivalent	0.60	1.04	1.57	1.85	2.27	2.57	2.63	2.90	3.33
Color	Visual	Fujipoly	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray
Thermal Conductivity	watt/mk	ASTM D5470	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Volume Resistivity	M Ohms · m	ASTM D257	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>
Withstand Voltage	kV/mm-AC	ASTM D149	9	9	9	9	9	9	9	9	9
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
Hardness	Shore 00	ASTM D2240	<49	<49	<49	<49	<49	<49	<49	<49	<49
Elongation	%	ASTM D412	60	60	60	60	60	60	60	60	60
10% Compression	Kgf/in <sub>1</sub>	Fujipoly	17.0	15.2	15.4	11.2	8.2	7.3	6.5	5.4	4.8
50% Compression	Kgf/in <sub>1</sub>	Fujipoly	112.9	101.9	82.6	67.5	62.2	50.1	49.8	48.7	42.7
Sustain 50% Compression	Kgf/in <sub>1</sub>	Fujipoly	96.4	71.6	49.9	31.2	25.8	20.0	18.9	18.2	17.9

**Variation: GR-FB**

	Identifier	Test Method	50G-FB	100G-FB	150G-FB	200G-FB	250G-FB	300G-FB	350G-FB	400G-FB	500G-FB
Thickness	mm	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	1.5 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	2.5 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3	3.5 <sup>±</sup> 0.3	4.0 <sup>±</sup> 0.4	5.0 <sup>±</sup> 0.5
Thermal Resistance	°Cin <sub>1</sub> /W	ASTM D5470 Equivalent	0.50	0.93	1.28	1.66	1.99	2.13	2.45	2.70	3.22
Color	Visual	Fujipoly	Gray	Gray	Gray	Gray	Gray	Gray	Gray	Gray	Gray
Thermal Conductivity	watt/mk	ASTM D5470	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30
Volume Resistivity	M Ohms · m	ASTM D257	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>
Withstand Voltage	kV/mm-AC	ASTM D149	7	7	7	7	7	7	7	7	7
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Hardness	Shore 00	ASTM D2240	<49	<49	<49	<49	<49	<49	<49	<49	<49
Elongation	%	ASTM D412	60	60	60	60	60	60	60	60	60
10% Compression	Kgf/in <sub>1</sub>	Fujipoly	11.0	14.5	13.8	10.3	8.0	6.0	4.5	3.9	2.3
50% Compression	Kgf/in <sub>1</sub>	Fujipoly	108.4	99.8	79.6	65.0	59.0	49.8	47.2	46.1	42.1
Sustain 50% Compression	Kgf/in <sub>1</sub>	Fujipoly	84.9	69.2	45.2	29.2	24.3	18.7	17.3	16.7	16.5

## SARCON - výplňové materiály standard, GR-Hx

## SARCON GR-Hx

složení pásu:

- homogenní materiál
- jeden tvrzený povrch



standardní dodávky:

- šířka < 200mm
- délka < 300mm
- větší rozměr na požádání

rozsah prac. teplot: -60+200°C  
samozhášivost: V0-V1 (UL-94V)

typ	t <sub>l</sub> [mm]	R <sub>th</sub> [°C/W] [in <sup>2</sup> ]	Ko10 [Kgf/in <sup>2</sup> ]	Ko50 [Kgf/in <sup>2</sup> ]	barva	C <sub>T</sub> [W/m°C]	R <sub>i</sub> [MΩ*m]	U <sub>z</sub> [kV≈/mm]	m [g/cm <sup>3</sup> ]	H [Shore]	ΔL [%]
50GR-Hb	0.5	0.55	13.5	64.6	šedá	2.3	1.0x10 <sup>6</sup>	8	2.5	49	80
100GR-Hb	1.0	0.92	13.4	58.2							
150GR-Hb	1.5	1.30	10.8	44.9							
200GR-Hb	2.0	1.59	7.9	31.1							
250GR-Hb	2.5	2.07	6.5	26.0							
300GR-Hb	3.0	2.17	6.2	24.1							
350GR-Hb	3.5	2.40	6.1	21.2							
400GR-Hb	4.0	2.59	5.5	20.1							
500GR-Hb	5.0	3.31	4.8	17.0							
50GR-Hd	0.5	0.63	20.9	106.9							
100GR-Hd	1.0	1.10	19.8	91.6							
150GR-Hd	1.5	1.59	15.2	59.8							
200GR-Hd	2.0	1.94	12.3	3.4							
250GR-Hd	2.5	2.24	10.9	28.1							
300GR-Hd	3.0	2.54	8.0	25.2							
350GR-Hd	3.5	2.63	6.9	24.7							
400GR-Hd	4.0	2.88	5.7	23.1							
500GR-Hd	5.0	3.32	5.0	20.1							
50GR-Hk	0.5	0.90	13.0	60.0	šedá	1.20	4.2x10 <sup>4</sup>	17	2.3	48	200
100GR-Hk	1.0	1.52	18.0	78.0							
200GR-Hk	2.0	2.45	12.0	45.0							
300GR-Hk	3.0	3.26	6.0	39.0	šedá	2.8	24.x10 <sup>4</sup>	15	2.7	53	32
50GR-HL	0.5	0.59	18.0	97.0							
100GR-HL	1.0	0.93	16.0	92.0							
200GR-HL	2.0	1.41	9.0	55.0							
300GR-HL	3.0	1.88	7.0	45.0	tmavě červeno šedá	6.0	1.0x10 <sup>5</sup>	13	3.2	52	80
50GR-Hm	0.5	0.27	13.9	76.6							
100GR-Hm	1.0	0.45	15.6	74.6							
150GR-Hm	1.5	0.58	14.6	88.8							
200GR-Hm	2.0	0.75	9.3	54.2							
250GR-Hm	2.5	0.84	9.5	50.3							
300GR-Hm	3.0	0.92	8.3	42.5	šedá	7.9	6.8x10 <sup>3</sup>	11	3.2	64	40
50GR-Hn	0.5	0.19	15.5	79.3							
100GR-Hn	1.0	0.37	19.0	87.3							
150GR-Hn	1.5	0.48	14.8	83.5							
200GR-Hn	2.0	0.57	12.8	81.2	šedá	11.0	7.0x10 <sup>3</sup>	11	3.3	64	40
30XR-He	0.3	0.11	2.4	52.5							
50XR-He	0.5	0.16	5.9	88.3							
100XR-He	1.0	0.23	10.2	86.4							
150XR-He	1.5	0.27	10.1	84.3							
200XR-He	2.0	0.35	11.5	80.3	šedá	14.0	7.3x10 <sup>3</sup>	11	3.2	64	40
30XR-Hj	0.3	0.09	4.6	60.3							
50XR-Hj	0.5	0.14	12.6	89.4							
100XR-Hj	1.0	0.20	10.5	82.1							
150XR-Hj	1.5	0.25	12.6	79.2							
200XR-Hj	2.0	0.34	13.2	75.6	šedá	17.0	1x10 <sup>5</sup>	15	3.2	80	35
100XR-Hm	1.0	0.14	10.0	66.0							
150XR-Hm	1.5	0.19	18.0	55.0							
200XR-Hm	2.0	0.24	16.0	44.0							

**SARCON - výplňové materiály standard, GR-Hx, GR-HD, GR-HB****Variation: GR-Hx**

SARCON® Thermal Gap Filler Pads are highly conformable and high heat conducting gel materials in a versatile sheet form. They easily fit and adhere to most all shapes and sizes of components, including protrusions and recessed areas.

In areas where space between surfaces is uneven or varies and where surface textures are a concern regarding efficient thermal transfer, the supple consistency of the pads is excellent for filling air gaps and uneven surfaces.

**Variation: GR-Hx – základní vlastnosti**

Properties	Unit		SARCON GR-H								
Extractable Volatiles	Content % Cyclodimethyl Siloxane	Fujipoly	D4~D10 <0.0010 wt%	D11~d20 <0.0043 wt%	D4~D20 <0.0043 wt%						
Continuous Use	°C	Fujipoly	-60°C to 200°C								
Flame Retardance	UL-94V Standard	UL	V0								
Dimension Available	Thickness (mm)	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	1.5 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	2.5 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3	3.5 <sup>±</sup> 0.3	4.0 <sup>±</sup> 0.3	
Dimension Available	Width (mm)	Fujipoly	180 Maximum		180 Maximum		180 Maximum				
Dimension Available	Length (mm)	Fujipoly	280 Maximum		280 Maximum		280 Maximum				
Packaging	Standard	Fujipoly	Each sheet is placed between top and bottom film liners for die cutting handling ease.								

**Variation: GR-HD**

	Identifier	Test Method	50G-HD	100G-HD	150G-HD	200G-HD	250G-HD	300G-HD	350G-HD	400G-HD	500G-HD
Thickness	mm	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	1.5 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	2.5 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3	3.5 <sup>±</sup> 0.3	4.0 <sup>±</sup> 0.4	5.0 <sup>±</sup> 0.5
Thermal Resistance	°Cin <sub>1</sub> /W	ASTM D5470 Equivalent	.63	1.10	1.59	1.94	2.24	2.54	2.63	2.88	3.32
Color	Visual	Fujipoly	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray
Thermal Conductivity	watt/mk	ASTM D5470	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Volume Resistivity	M Ohms · m	ASTM D257	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>
Withstand Voltage	kV/mm-AC	ASTM D149	<49	<49	<49	<49	<49	<49	<49	<49	<49
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
Hardness	Shore 00	ASTM D2240	<18	<18	<18	<18	<18	<18	<18	<18	<18
Elongation	%	ASTM D412	80	80	80	80	80	80	80	80	80
10% Compression	Kgf/in <sub>2</sub>	Fujipoly	20.9	19.8	15.2	12.3	10.9	8.0	6.9	5.7	5
50% Compression	Kgf/in <sub>2</sub>		135.6	121.7	115.0	98.1	83.0	68.1	65.2	60.1	52.1
Sustain 50% Compression	Kgf/in <sub>2</sub>	Fujipoly	106.9	91.6	59.8	33.4	28.1	25.2	24.7	23.1	20.1

**Variation:GR-HB**

|-----Available by Request Only-----|

	Identifier	Test Method	50G-HB	100G-HB	150G-HB	200G-HB	250G-HB	300G-HB	350G- HB	400G-HB	500G-HB
Thickness	mm	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	1.5 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	2.5 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3	3.5 <sup>±</sup> 0.3	4.0 <sup>±</sup> 0.4	5.0 <sup>±</sup> 0.5
Thermal Resistance	°Cin <sub>1</sub> /W	ASTM D5470 Equivalent	.55	.92	1.30	1.59	2.07	2.17	2.40	2.59	3.31
Color	Visual	Fujipoly	Gray	Gray	Gray	Gray	Gray	Gray	Gray	Gray	Gray
Thermal Conductivity	watt/mk	ASTM D5470	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30
Volume Resistivity	M Ohms · m	ASTM D257	1.0x10 <sup>6</sup> 6	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>
Withstand Voltage	kV/mm-AC	ASTM D149	8	8	8	8	8	8	8	8	8
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Hardness	Shore 00	ASTM D2240	<49	<49	<49	<49	<49	<49	<49	<49	<49
Elongation	%	ASTM D412	80	80	80	80	80	80	80	80	80
10% Compression	Kgf/in <sub>2</sub>	Fujipoly	13.5	13.4	10.8	7.9	6.5	6.2	6.1	5.5	4.8
50% Compression	Kgf/in <sub>2</sub>		103.6	97.2	89.6	75.2	67.8	52.4	47.6	42.1	33.1
Sustain 50% Compression	Kgf/in <sub>2</sub>	Fujipoly	64.6	58.2	44.9	31.1	26.0	24.1	21.2	20.1	17.0

**SARCON - výplňové materiály standard, GR-Hk, Hl, Hm****Variation: GR-HK**

	Identifier	Test Method	50G-HK	100G-HK	200G-HK	300G-HK
Thickness	mm	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3
Thermal Resistance	°Cin <sub>2</sub> /W	FTM P-3020 (ASTM D5470 Equivalent)	.90	1.52	2.45	3.26
Color	Visual	Fujipoly			Gray	
Thermal Conductivity	watt/mk	FTMP-1620 (ASTM D2326 Equivalent)			1.20	
Volume Resistivity	M Ohms · m	ASTM D257			4.20x10 <sup>4</sup>	
Withstand Voltage	kV/mm-AC	ASTM D149			17	
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792			2.3	
Hardness	Shore 00	ASTM D2240			48	
Elongation	%	ASTM D412			200	
10% Compression	Kgf/in <sub>2</sub>	Fujipoly	13.0	18.0	12.0	6.0
Sustain 50% Compression	Kgf/in <sub>2</sub>	Fujipoly	60.0	78.0	45.0	39.0

**Variation: GR-HL**

	Identifier	Test Method	50G-HL	100G-HL	200G-HL	300G-HL
Thickness	mm	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3
Thermal Resistance	°Cin <sub>2</sub> /W	FTM P-3020 (ASTM D5470 Equivalent)	.59	.93	1.41	1.88
Color	Visual	Fujipoly			Gray	
Thermal Conductivity	watt/mk	FTMP-1620 (ASTM D2326 Equivalent)			2.8	
Volume Resistivity	M Ohms · m	ASTM D257			2.4x10 <sup>4</sup>	
Withstand Voltage	kV/mm-AC	ASTM D149			75	
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792			2.7	
Hardness	Shore 00	ASTM D2240			53	
Elongation	%	ASTM D412			32	
10% Compression	Kgf/in <sub>2</sub>	Fujipoly	18.0	16.0	9.0	7.0
Sustain 50% Compression	Kgf/in <sub>2</sub>	Fujipoly	97.0	92.0	55.0	45.0

**Variation: GR-HM**

	Identifier	Test Method	50G-HM	100G-HM	150G-HM	200G-HM	250G-HM	300G-HM
Thickness	mm	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	1.5 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	2.5 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3
Thermal Resistance	°Cin <sub>2</sub> /W	ASTM D5470 Equivalent	0.27	0.45	0.58	0.75	0.84	0.92
Color	Visual	Fujipoly	Dark Reddish Gray	Dark Reddish Gray	Dark Reddish Gray	Dark Reddish Gray	Dark Reddish Gray	Dark Reddish Gray
Thermal Conductivity	watt/mk	ASTM D5470	6.0	6.0	6.0	6.0	6.0	6.0
Volume Resistivity	M Ohms · m	ASTM D257	1.0x10 <sup>5</sup>	1.0x10 <sup>5</sup>	1.0x10 <sup>5</sup>	1.0x10 <sup>5</sup>	1.0x10 <sup>5</sup>	1.0x10 <sup>5</sup>
Withstand Voltage	kV-AC	ASTM D149	13	13	13	13	13	13
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792	3.2	3.2	3.2	3.2	3.2	3.2
Hardness	Shore 00	ASTM D2240	<52	<52	<52	<52	<52	<52
Elongation	%	ASTM D412	80	80	80	80	80	80
10% Compression	Kgf/in <sub>2</sub>	Fujipoly	13.9	15.6	14.6	9.3	9.5	8.3
Sustain 50% Compression	Kgf/in <sub>2</sub>	Fujipoly	76.6	74.6	88.8	54.2	50.3	42.5

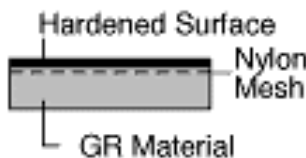
**SARCON - výplňové materiály standard, GR-HFx****SARCON GR-HFx**

složení pásu: - homogenní materiál, smyčková výztuha, jeden tvrzený povrch  
standardní dodávky: - šířka < 200mm, délka < 300mm, větší rozměr na poptávku

rozsah prac. teplot: -60+200°C  
samozhášivost: V0-V1 (UL-94V)

SARCON® Thermal Gap Filler Pads are highly conformable and high heat conducting gel materials in a versatile sheet form. They easily fit and adhere to most all shapes and sizes of components, including protrusions and recessed areas.

In areas where space between surfaces is uneven or varies and where surface textures are a concern regarding efficient thermal transfer, the supple consistency of the pads is excellent for filling air gaps and uneven surfaces.



typ	tl [mm]	Rth [°C/W] [in²]	Ko10 [Kg/in²]	Ko50 [Kg/in²]	barva	C <sub>T</sub> [W/m°C]	Ri [MΩ*m]	U <sub>z</sub> [kV~/mm]	m [g/cm³]	H [Sh 00]	ΔL [%]
50GR-HFd	0.5	0.67	22.5	119.8	tmavě šedá	1.5	1.0x10 <sup>6</sup>	8	2.6	49	60
100GR-HFd	1.0	1.11	20.7	102.9							
150GR-HFd	1.5	1.66	20.1	78.2							
200GR-HFd	2.0	1.92	15.7	50.8							
250GR-HFd	2.5	2.4	14.8	41.7							
300GR-HFd	3.0	2.68	12.1	38.9							
350GR-HFd	3.5	2.75	9.8	32.2							
400GR-HFd	4.0	2.92	9.0	32.1							
500GR-HFd	5.0	3.37	7.1	25.2							

Properties	Unit	SARCON GR-HF									
Extractable Volatiles	Content % Cyclodimethyl Siloxane	Fujipoly	D4~D10 <0.0010 wt%			D11~d20 <0.0043 wt%		D4~D20 <0.0043 wt%			
Continuous Use	°C	Fujipoly	-60°C to 200°C								
Flame Retardance	UL-94V Standard	UL	V0								
Dimension Available	Thickness (mm)	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	1.5 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	2.5 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3	3.5 <sup>±</sup> 0.3	4.0 <sup>±</sup> 0.3	5.0 <sup>±</sup> 0.3
Dimension Available	Width (mm)	Fujipoly	180 Maximum			180 Maximum			180 Maximum		
Dimension Available	Length (mm)	Fujipoly	280 Maximum			280 Maximum			280 Maximum		
Packaging	Standard	Fujipoly	Each sheet is placed between top and bottom film liners for die cutting handling ease.								

**GR-HFD**

	Identifier	Test Method	50G-HFD	100G-HFD	150G-HFD	200G-HFD	250G-HFD	300G-HFD	350G-HFD	400G-HFD	500G-HFD
Thickness	mm	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	1.5 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	2.5 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3	3.5 <sup>±</sup> 0.3	4.0 <sup>±</sup> 0.4	5.0 <sup>±</sup> 0.5
Thermal Resistance	°Cin <sub>1</sub> /W	ASTM D5470 Equivalent	0.67	1.11	1.66	1.92	2.40	2.68	2.75	2.92	3.37
Color	Visual	Fujipoly	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray	Dark Gray
Thermal Conductivity	watt/mk	ASTM D5470	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Volume Resistivity	M Ohms · m	ASTM D257	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>
Withstand Voltage	kV/mm-AC	ASTM D149	8	8	8	8	8	8	8	8	8
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
Hardness	Shore 00	ASTM D2240	<49	<49	<49	<49	<49	<49	<49	<49	<49
Elongation	%	ASTM D412	60	60	60	60	60	60	60	60	60
10% Compression	Kgf/in <sub>1</sub>	Fujipoly	22.5	20.7	20.1	15.7	14.8	12.1	9.8	9.0	7.1
50% Compression	Kgf/in <sub>1</sub>	Fujipoly	137.6	130.9	117.8	108.9	87.4	70.8	68.0	62.7	53.9
Sustain 50% Compression	Kgf/in <sub>1</sub>	Fujipoly	119.8	102.9	78.2	50.8	41.7	38.9	32.2	32.1	25.2

**GR-HFB**

	Identifier	Test Method	50G-HFB	100G-HFB	150G-HFB	200G-HFB	250G-HFB	300G-HFB	350G-HFB	400G-HFB	500G-HFB
Thickness	mm	Fujipoly	0.5 <sup>±</sup> 0.1	1.0 <sup>±</sup> 0.2	1.5 <sup>±</sup> 0.2	2.0 <sup>±</sup> 0.3	2.5 <sup>±</sup> 0.3	3.0 <sup>±</sup> 0.3	3.5 <sup>±</sup> 0.3	4.0 <sup>±</sup> 0.4	5.0 <sup>±</sup> 0.5
Thermal Resistance	°Cin <sub>1</sub> /W	ASTM D5470 Equivalent	.65	1.07	1.45	1.74	2.09	2.35	2.48	2.72	3.36
Color	Visual	Fujipoly	Gray	Gray	Gray	Gray	Gray	Gray	Gray	Gray	Gray
Thermal Conductivity	watt/mk	ASTM D5470	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30
Volume Resistivity	M Ohms · m	ASTM D257	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>	1.0x10 <sup>6</sup>
Withstand Voltage	kV/mm-AC	ASTM D149	7	7	7	7	7	7	7	7	7
Specific Gravity	gr/cm <sup>3</sup>	ASTM D792	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Hardness	Shore A	ASTM D2240	<49	<49	<49	<49	<49	<49	<49	<49	<49
Elongation	%	ASTM D412	60	60	60	60	60	60	60	60	60
10% Compression	Kgf/in <sub>1</sub>	Fujipoly	16.0	15.5	14.2	11.2	10.8	9.9	8.9	7.9	7.1
50% Compression	Kgf/in <sub>1</sub>	Fujipoly	135.5	122.2	105.8	96.6	72.6	68.9	61.2	59.7	51.0
Sustain 50% Compression	Kgf/in <sub>1</sub>	Fujipoly	116.4	93.5	68.7	45.2	35.2	32.5	30.2	29.2	24.2