

SARCON® Thermal Conductivity List

Thermal Conductivity (W/mK)	RUBBER TYPE	GAP FILLER TYPE	EXTREMELY COMPRESSIBLE GAP FILLER TYPE	FORM IN PLACE GAP FILLER TYPE	NON-SILICONE GAP FILLER TYPE	ELECTROMAGNETIC WAVE ABSORPTION TYPE
0.8						EGR-11F (1.0W/mK)*1
0.9	GTR					
1.1	QR					
1.2	TR					
1.3		GR-ae GR-d GR-Sd (1.5W/mK)*1			NR-c (1.5W/mK)*1	
1.4	GHR	GR14A (1.6W/mK)*1				
1.7	HR					
2.0				SPG-20A		
2.1				SPG-20B		
2.2	YR-a					
2.5		GR25A (2.8W/mK)*1	PG25A (2.8W/mK)*1			
2.9	GSR					
3.0	GAR					
3.1				SPG-30B		
4.0	YR-c					
4.5		GR45A (6.0W/mK)*1	GR-Pm (6.0W/mK)*1			
5.0				SPG-50A		
8.0		GR80A (13.0W/mK)*2	PG80A (13.0W/mK)*2			
11.0		XR-m (17.0W/mK)*2	XR-Um (17.0W/mK)*2			

Measured by using Hot Disk method, refer to Fujipoly Test method "FTM P-1612". → See P.35
 Rubber Type and *1 : Measured by using Hot Wire method, refer to Fujipoly Test method "FTM P-1620". → See P.35
 *2 : Measured by using ASTM D5470 modified, refer to Fujipoly Test method "FTM P-3030". → See P.36

Thin film with high electric isolation

RUBBER TYPE

Test Method: Thermal Conductivity (W/m-K)

Hot Wire : 1.1	QR
Hot Wire : 1.2	TR
Hot Wire : 1.7	HR
Hot Wire : 2.2	YR-a
Hot Wire : 4.0	YR-c

Thin film with high electric isolation and high mechanical strength

RUBBER TYPE within Glass Fiber Cloth

Hot Wire : 0.9	GTR
Hot Wire : 1.4	GHR
Hot Wire : 2.9	GSR
Hot Wire : 3.0	GAR

Thin or middle thickness with wider gap's variation

GAP FILLER TYPE Standard Gap Filler Pads

Hot Wire : 1.5	GR-ae
Hot Disk : 1.3	
Hot Wire : 1.5	GR-d
Hot Disk : 1.3	
Hot Wire : 1.6	GR14A
Hot Disk : 1.4	
Hot Wire : 2.8	GR25A
Hot Disk : 2.5	
Hot Wire : 6.0	GR45A
Hot Disk : 4.5	

Thin or middle thickness with wider gap's variation and low thermal resistance

GAP FILLER TYPE High Performance Gap Filler Pads

ASTM D5470 : 13.0	GR80A
Hot Disk : 8.0	
ASTM D5470 : 17.0	XR-m
Hot Disk : 11.0	

For wider gaps with better compressibility

GAP FILLER TYPE Standard Gap Filler Pads

Hot Wire : 1.5	GR-Sd
Hot Disk : 1.3	

For wider gaps with better compressibility

EXTREMELY COMPRESSIBLE GAP FILLER TYPE (PUTTY TYPE) Highly Thermally Conductive and Non-Flammable interface materials

Hot Wire : 2.8	PG25A
Hot Disk : 2.5	
Hot Wire : 6.0	GR-Pm
Hot Disk : 4.5	
ASTM D5470 : 13.0	PG80A
Hot Disk : 8.0	

Minimum thickness with Both-sides sticky Silicone putty pad

EXTREMELY COMPRESSIBLE GAP FILLER TYPE (PUTTY TYPE) Highest Thermally Conductive and Non-Flammable interface materials

ASTM D5470 : 17.0	XR-Um
Hot Disk : 11.0	

For wider gaps with better compressibility

FORM IN PLACE GAP FILLER TYPE

Hot Disk : 2.0	SPG-20A
Hot Disk : 2.1	SPG-20B
Hot Disk : 3.1	SPG-30B
Hot Disk : 5.0	SPG-50A

Thin or middle thickness with Non-Silicone Pad

NON-SILICONE GAP FILLER TYPE

Hot Wire : 1.5	NR-c
Hot Disk : 1.3	

To absorb and damp range of electromagnetic waves

ELECTROMAGNETIC WAVE ABSORPTION TYPE

Hot Wire : 1.0	EGR-11F
Hot Disk : 0.8	

Minimum thickness (Silicone and Non-Silicone formulations)

GREASE TYPE

ASTM D5470 : 0.75 to 4.2	SG-SL / SG-NS
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ASTM D5470: Measured by ASTM D5470 modified, refer to Fujipoly Test method "FTM-P3030". → See P.36