

Silicone-free Thermal-conductive Sheets

The ALMO Series uses TPE materials while the Ru Series and SF-J use α -olefin materials.

These materials present none of the risks of contact failure posed by conventional silicone materials due to their siloxane content.

In addition, Silicone-free Thermal-conductive Sheets are furnished with electrical insulation properties, flexibility and flame retardance to realize outstanding workability and processability.



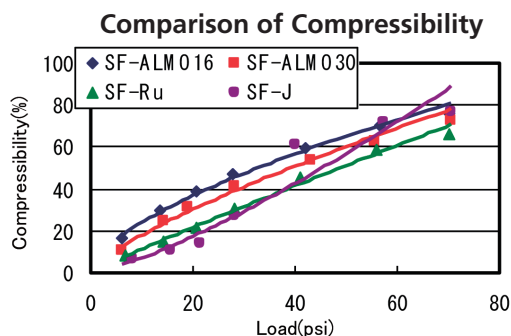
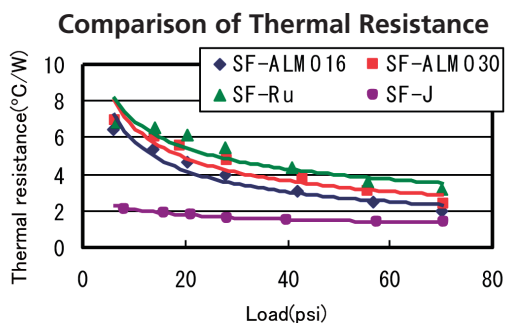
Figure: SF-Ru: Good shape recovery performance to realize outstanding reworkability

Characteristics

		SF-ALMO16	SF-ALMO30	SF-Ru/SF-RuS	SF-J
Appearance	-				
Base Polymer	-	TPE	TPE	α -olefin	α -olefin
Features	-	Double-sided adhesive	Double-sided adhesive	Single/Double-sided Adhesive	Double-sided adhesive
Hardness	JIS Type E	16	30	35	40
Specific Gravity	-	1.7	1.7	1.8	1.9
Volume Resistance	$\Omega \cdot \text{cm}$	$\geq 1 \times 10^{10}$	$\geq 1 \times 10^{10}$	$\geq 1 \times 10^{10}$	$\geq 1 \times 10^5$
Breakdown Voltage	AC kV/mm	≥ 10	≥ 10	≥ 10	> 0.7
Withstand Voltage	AC kV/mm	≥ 10	≥ 10	≥ 10	> 0.7
Thermal Conductivity*1	W/m·K	1.5	1.5	2.0	15
Thermal Conductivity*2	W/m·K	1.0	1.0	1.1	6
Operating Temperature Range	$^{\circ}\text{C}$	-40-120	-40-120	-40-110	-40-120
Flame Retardance	UL 94	V-0	V-0	V-0	V-0 equivalent
Thickness	mm	0.5-	0.5-	0.5-	0.5-3.0

*1: Thermal resistance conversion method, *2: ASTM D5470

The SF-J specification is subject to change without notice. Numerical values shown in the above table are actual measured values, not product standard values.



Thermal resistance measurement conditions: 10mm x 10mm X 2.0mm samples measured by a thermal resistance measuring device manufactured by Polymatech, Heater calorific value: 4W (25W for SF-J)