



## SILICONE SHEET FOR BONDING PROCESS: SPIEA-300

### Characteristic

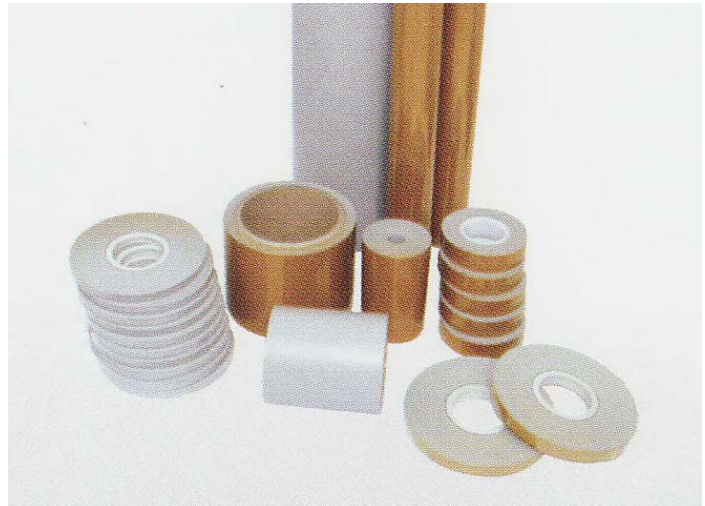
SPIEA-300 is highly thermally conductive silicone/Polyimide rubber sheet, made specifically as insulator for FOB bonding process, TAB bonding process, and large scale ACF bonding process. The sheet has high dielectric strength with excellent heat conductivity, while the Polyimide layer gives high volume resistivity and mechanical strength.

Most of the insulators are for single stroke use, while SPIEA-300 insulator can withstand multiple strokes (averaging 10 strokes), thereby resulting in substantial cost savings (less material usage, less frequent core change saving labor and time).

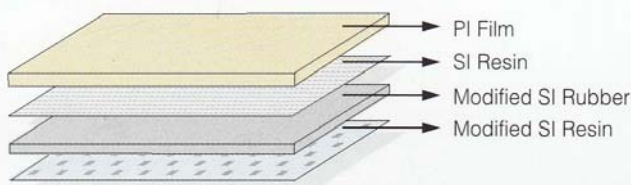
- Key Features:
- \* Excellent dielectric strength
  - \* High thermal conductivity
  - \* Thickness uniformity and accuracy
  - \* Flexible
  - \* High mechanical strength
  - \* Heat stable

### Suggested Applications

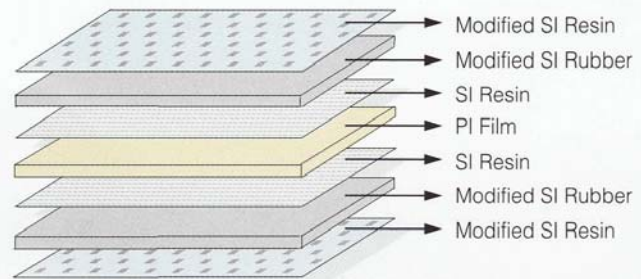
- \* AFC Bonding Process
- \* FOG Bonding Process
- \* TAB Bonding Process
- \* COB & COF Bonding Process
- \* Thermally conductive spacer for power transistors
- \* As heat conducting media for temperature sensors



**Structure of SPIEA-300 SS  
(Single-Side Silicone)**



**Structure of SPIEA-300 DS  
(Double-Side Silicone)**



### Technical data

	SPIEA-300 SS	SPIEA-300 DS
Thickness (mm)	0.06 <sup>±0.01</sup> , 0.10 <sup>±0.02</sup> , 0.20 <sup>±0.02</sup> , 0.25 <sup>±0.02</sup>	0.25 <sup>±0.01</sup> , 0.30 <sup>±0.03</sup> , 0.35 <sup>±0.03</sup> , 0.40 <sup>±0.03</sup>
Color	Beige / Gray	Beige / Gray
Thermal Conductivity (W/mk)	1.0	1.0
Reinforcement	Polyimide	Polyimide
Specific Gravity (g/cm <sup>3</sup> )	2.30	2.30
Hardness (Shore A)	75	75
Tensile Strength (MPa)	50 min	50 min
Continuous Usage Temp. (°C)	-60 to +180	-60 to +180
Elongation (%)	50	50
Tear Strength (KN/m)	3 min	4 min
Volume Resistivity (ohm-meter)	3.0 x 10 <sup>15</sup>	3.0 x 10 <sup>15</sup>
Dielectric Strength (kV)	11	11
Dielectric Constant	4.4 ~ 4.9	4.4 ~ 4.9

Note: These values are for reference only. Actual application performance is dependent on surface roughness, flatness and pressure applied.