

ADDY-SIL 463

THERMALLY CONDUCTIVE SILICONE POTTING COMPOUND

• PRODUCT DESCRIPTION

ADDY-SIL 463 is a two component, thermally conductive silicone elastomer potting and encapsulation compound. ADDY-SIL 463 is designed for encapsulation by casting of circuit boards, hybrid circuits, and power supplies, where flexibility, reparability, and high temperature resistance are required. Very good adhesion to most common circuitboard materials. Complies with UL94 V-0

• CURING PROPERTIES

Pot Life @ 25°C	45 min.
Cure Time @ 25°C	6-7 hrs. (Full properties develop after 24 hours)
@ 85°C	1hr.
@ 100°C	30 min.

• UNCURED PROPERTIES

Base	Silicone
Color	Gray
Specific Gravity	1,6
Viscosity (cps)	12000
Mix ratio (by weight/volume)	100:100

• CURED PROPERTIES

Hardness (Shore A)	65
Operating Temperature (°C)	-65°C to 200°C
Shrinkage on Cure	<1%
Tg, °C	-64°C(TG1), -48°C(TG2)
Thermal Conductivity	1W/mK
Weight Loss, (1 week at 150°C)	0,25%
Coefficient of Thermal Expansion	55 x 10 ⁻⁵ /°C



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● ELECTRICAL PROPERTIES (CURED)

Volume Resistivity ASTM D257 100 V (Ω-cm) 500 V (Ω-cm) 1000 V (Ω-cm)	8.0×10^{14} 6.3×10^{14} 1.4×10^{15}
Dielectric Constant/Dissipation Factor ASTM D150 120 Hz 1000 Hz	4.7/0.0085 4.8/0.0085
Dielectric Strength ASTM D149 (1.6 mm thickness) - NASA Outgassing	25 kV/mm 0.27 %TML 0.13% CVCM 0.00% WVR

● INSTRUCTIONS FOR USE

Shelf life: Store in original, unopened containers for 12 months at room temperature.

