KLEBER KB-XERM SE0860 Thermally Conductive Silicone Encapsulant

Product Introduction

KLEBER KB-XERM SE0860 is a two-component silicone encapsulant designed to provide excellent thermal conductivity for electrical/electronic encapsulating applications, at the same time to provide a certain protection.

Features and Benefits

- Room or elevated temperature Cure
- Low exotherm and stress
- Excellent thermal conductivity
- High temperature resistant
- Non-flammable

Typical Properties

Properties	Unit	Part A	Part B	Mixed
Appearance	-	Black liquid	White liquid	Black liquid
Viscosity @ 25°C	cps	3000-5000	3000-5000	3000-5000
Specific Gravity	g/cm^3	1.56	1.56	1.56
Mix Ratio by volume	-	1	1	-
Mix Ratio by weight	-	1	1	-
Working life @ 25°C	min	-	-	60
Gel time @ 80°C	min	-	-	6-12
Curing time @ 25°C	h	-	-	24
Curing time @80°C	min	-	-	30

Typical Cured Properties

Properties	Unit	Test Method	Value
Thermal Conductivity	W/m·K	ASTM D5470	0.8
Hardness	Shore A	ASTM D2240	50
Tensile Strength	MPa	ASTM D638	1.0
Elongation at break	%	ASTM D638	30
Volume Resistivity @ 25°C	Ohm-cm	ASTM D257	$1x10^{14}$
Dielectric Strength	kV/mm	ASTM D149	> 13

Application

- On board charger
- Power modules
- Automotive
- Communication components

Operation Process

- Mixing and apply: Thoroughly stir each component prior to mixing. Mix A and B parts at a ratio of 1:1 by weight or volume, until the color is uniform. Automatic mix/dispense equipment can be used for high volume production. Vacuuming are recommended to eliminate the air bubbles during the mixing.
- Curing: the mixed encapsulant can be cured for 30 minutes at 80°C, or 24 hours at room temperature, Avoid applying to substrates containing inhibitors like amines, sulfuer or tin salts.

Shelf Life/Storage

- Shelf life of each component is 6 months from date of manufacture when stored at 10-25°C in original unopened container. The packaging container should be inverted periodically to reduce settlement.

Cautions：
The information provided in the Technical Data Sheet (TDS) (including product use and application recommendations) is based on our knowledge and experience of Kleber products. The data contained in this TDS is for reference only and is considered reliable. We cannot be held responsible for the results of others as a result of methods beyond our control. This product can have a variety of different applications and different working conditions in your environment, which is beyond our control. Therefore, Kleber assumes no responsibility for whether the product is suitable for your production process and conditions as well as the expected applications and results. We strongly recommend that you test the product before use to confirm the applicability of the product.

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