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Technical Data Sheet
ULT-636-90

Overview

ULT-636-90 is an elastomeric polymer with liquid metal suspension that offers exceptional thermal conductivity after curing.

Main characteristics:

- Elastomeric solid
- Delivered in dispensing syringes (3 ml to 70 ml)
- Exceptionally high heat transfer properties

Applications:

- Chip-to-heatsink thermal interface material
- Snap-cure package assembly

Cure Conditions	Nominal Value	SI Units
Temperature	150	°C
Time	10	min
Storage		
Temperature	-30	°C
Shelf-Life	180	Days
Thermal Properties		
R_{th} @ BLT = 30μm	4±1	$mm^2 \cdot K/W$
R_{th} @ BLT = 20μm	2±1	
Liquid Metal T_m	-50	°C
Weight Loss 175C, 60 min	<0.15	wt%
Mechanical Properties		
Elongation at Break	250	% Strain
Elastic Modulus	308	kPa
Lap Shear Strength	165	kPa
Shore Hardness (Type OO)	64	
Viscosity		
Zero shear viscosity (η_o)	138	Pa·s
Viscosity @ 10^{-3} MPa shear stress	41	Pa·s
Reliability		
HAST (85°C/85% RH)	1000	hours
Microscopy		
Average liquid metal particle size	50	μm
Augerability	Yes	
Color	Grey	