

Technical Data Sheet

ALT-304-90

Overview ALT-304-90 is an elastomeric polymer with liquid metal suspension that offers exceptional thermal conductivity and adhesion after curing.

Main characteristics:

- Elastomeric solid
- Delivered in dispensing syringes (3 ml to 70 ml)
- High adhesion and heat transfer properties

Applications:

- Chip-to-heatsink thermal interface material
- Power module thermal interface material

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 = 45 μm	33±2	mm ² ·K/W
R _{th} @ BLT = 20 μm	13±2	
Liquid Metal T _m	<-40	°C
Weight Loss 175C, 60 min	<0.05	wt%
Mechanical Properties		
Elongation at Break	250	% Strain
Elastic Modulus	600	kPa
Lap Shear Strength	800	kPa
Shore Hardness (Type OO)	65	
Viscosity		
Zero shear viscosity (η ₀)	1000	Pa·s
Viscosity @ 10 rad/s	190	Pa·s
Reliability		
HAST (85 °C/85% RH)	1000	hours
TST (-40C to +125C)	1000	cycles
Microscopy		
Average liquid metal particle size	65	microns
Augerability	Yes	
Color	Grey	