Heraeus

mAgic DA295A

Non-Pressure Sinter Paste

mAgic sinter paste DA295A is a lead-free die attach solution with improved workability and performance to meet challenging demands of semiconductor packaging.

mAgic DA295A benefits

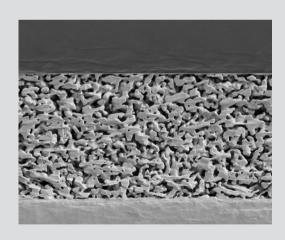
- Lead-free and zero halogen formulation
- Stable rhelogy
- Excellent dispensing performance
- Open time up to 120mins
- Consistent adhesion on Au surface
- Low temperature processing (200°C and above)
- Void-free
- No cleaning required



Application Information



 $\label{process_parameters} \mbox{Process parameters can be adjusted depending on application specific requirements}$



Material Comparison

Material Properties	Conductive Adhesive	Solder Paste (PbSn5Ag2.5)	mAgic Sinter Paste DA295A
Process Temperature (°C)	175 ~ 200	360 - 390	≥ 200
Ag Content (%)	75 ~ 85	2.5	100 (after sintering)
Electrical Resistivity (mΩ.cm)	≤ 0.1	0.046	≤ 0.008
Thermal Conductivity (W/m.K)	3 – 10	44	≥ 100
Residue free	Yes	No	Yes
Pb-free	Yes	No	Yes

Dispensing Performance Over Time



Consistent (no missing or irregular pattern) dispensing up to 12 hours.



No missing or irregular pattern detected.

Product Properties

Physical Properties	DA295A			
Fillers	Silver			
Metal content	82 %			
Particle size	$\leq 25\mu m$			
Sinter temperature	≥ 200 °C			
Halogen content	Zero Halogen			
Compatible surfaces	Ag, Au			
Sinter atmosphere	Air, N ₂			
Application/Process				
Dispensing	Yes			
Features & Benefits				
Work life	12 hrs			
Shelf life	6 mths			
Residue cleaning	Not required			
Storage condition	2 – 10°C			

Open Time	0 hr	1 hr	2 hr
Voids Performance			
High Resolution Magnification			

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