

confidential



# Electrical Conductive Adhesive *(Solder Replacement)*

Namics Corporation  
July 2016

# Features and Benefits

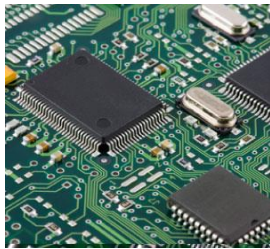
- Replacement for Lead Containing Solders
- Replacement for Brittling Lead Free Solders
  - Low Volume Resistivity
  - High Adhesion Strength
  - High Flexible Bond Line
  - Vibration Resistance
  - Excellent Temperature Cycling Resistance
  - High Moisture Stability

# Products

H9626 (Printing)  
H9626 D (Dispensing)



General Assembly



XH9674 (Printing)  
XH9674D (Dispensing)



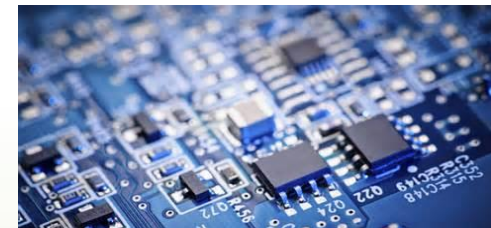
Tin Plated and High Performance Assembly



XH9698-3 (Printing)  
XH9698D-3 (Dispensing)



High Temperature Stable Assembly





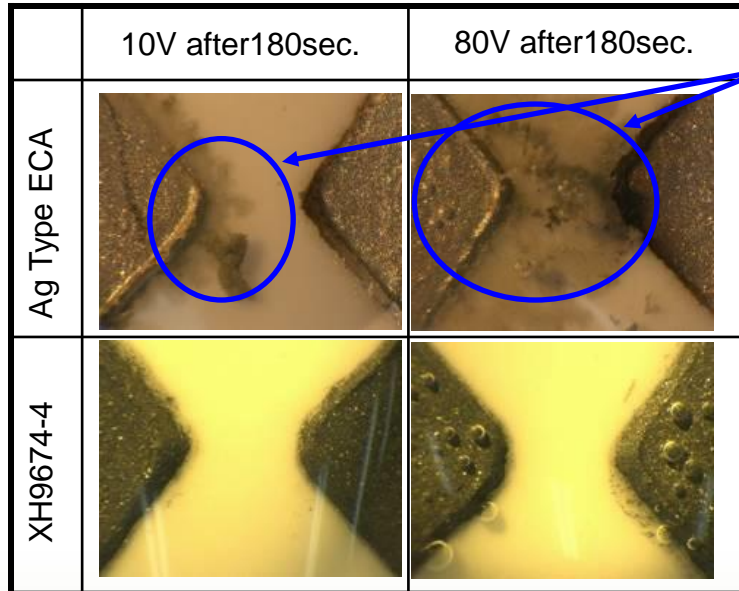
# Product Characteristics

		H9626	H9626D	XH9674	XH9674D	XH9698-3	XH9698D-3
Processing		Printing	Dispensing	Printing	Dispensing	Printing	Dispensing
Application		General Purpose, Flexible Bonds		Tin Plated Components, Ag Migration Control		High Thermal Stability, Vibration Resistant	
Filler Type		Ag		AgSn		Ag	
Viscosity @ 25°C	Pa.s	230	47	450	54	250	50
TI		3,1	4,9	1,7	4,3	6,0	6,7
Tg	°C	120	115	125	125	205	205
CTE	< Tg	ppm / °K	40	35	55	45	50
	> Tg	ppm / °K	110	110	110	115	85
Storage Modulus	GPa	6,0	6,5	10,0	7,5	6,2	8,0
Contact Resistance	mOhm	12,1	11,9	9,6	2,0	6,0	6,0
Adhesion Strength*	N / mm <sup>2</sup>	40	40	45	50	55	40
Pot Life @ 25°C	Days	7	3	1	1		
Curing	Min. @ °C	30 / 150	30 / 150	30 / 150	30 / 150	30 / 200	30 / 200

\* Al<sub>2</sub>O<sub>3</sub> Substrate, Size 3216

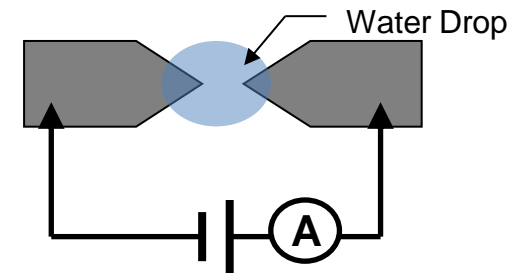
# XH9674 Migration Stability

As XH9674-4 contains AgSn filler, it does prevent Ag-migration.

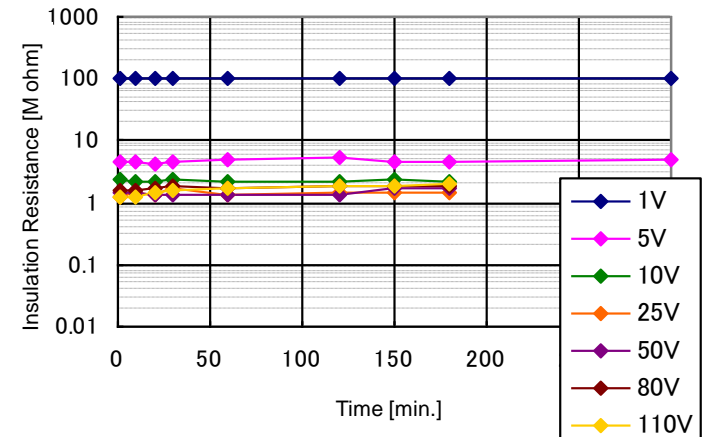


Ag Migration

Water Drop Test

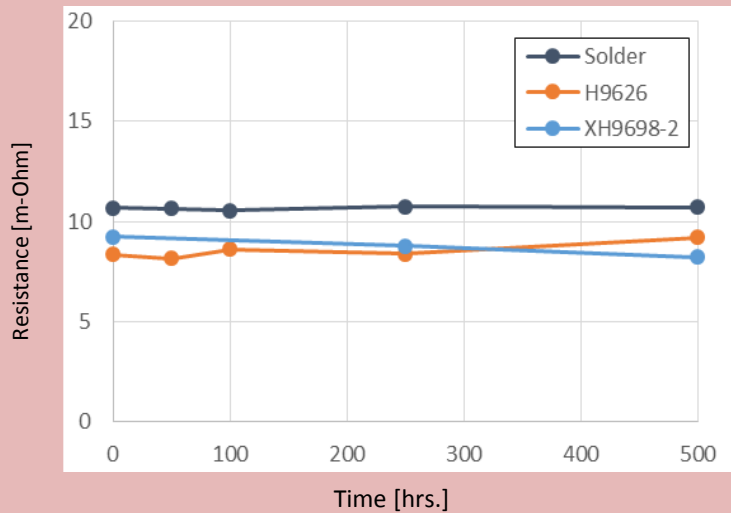


XH9674-4 Insulation Resistance

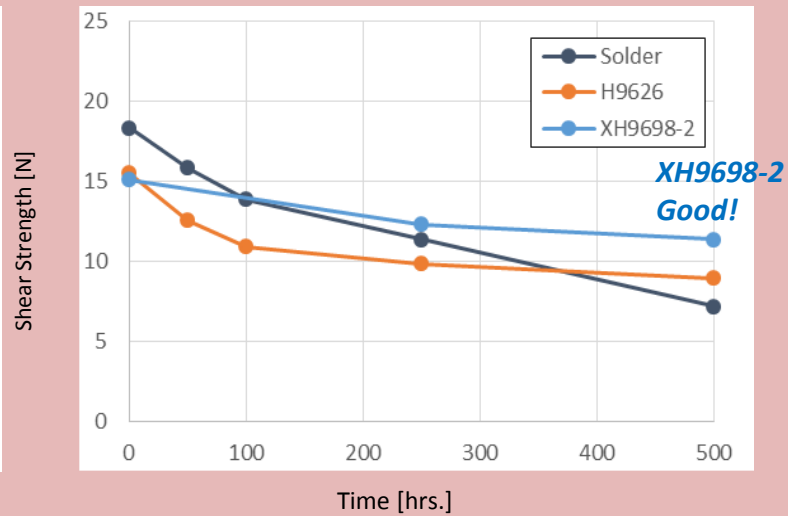


# High Temperature Storage, 200°C

-Contact Resistance-



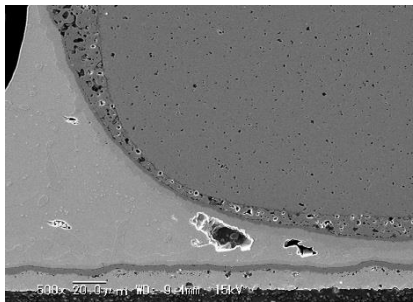
-Adhesion Strength-





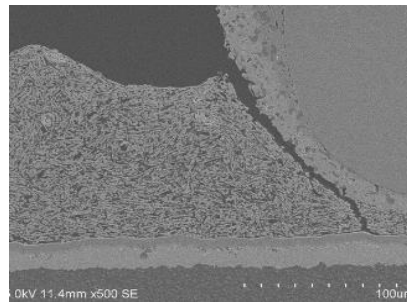
# High Temperature Storage, 200°C

Solder



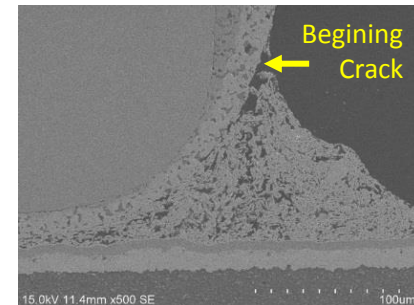
x500

H9626 Series

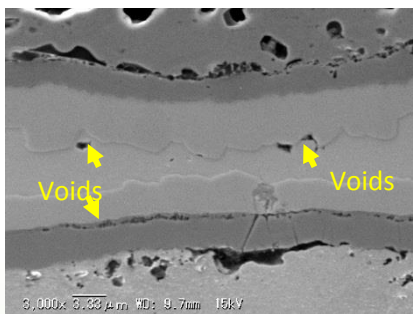


x500

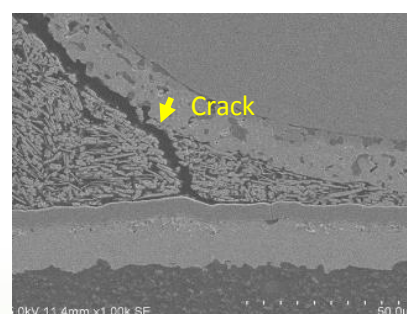
XH9698 Series



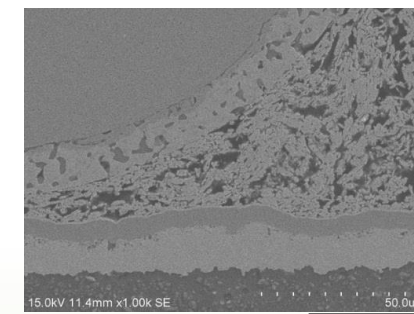
x500



x3000

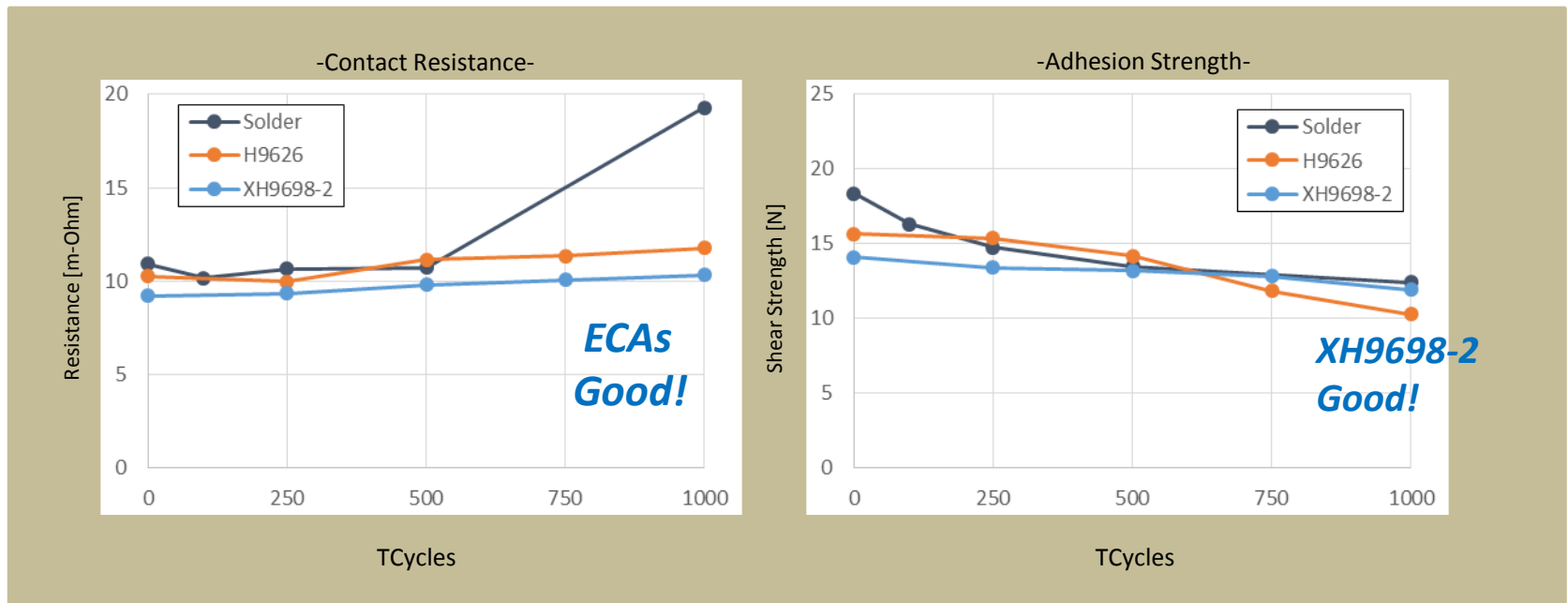


x1000



x1000

TCT  $-55^{\circ}\text{C}$  ↔  $+175^{\circ}\text{C}$



Stable Contact Resistance for ECA's



THANK YOU