

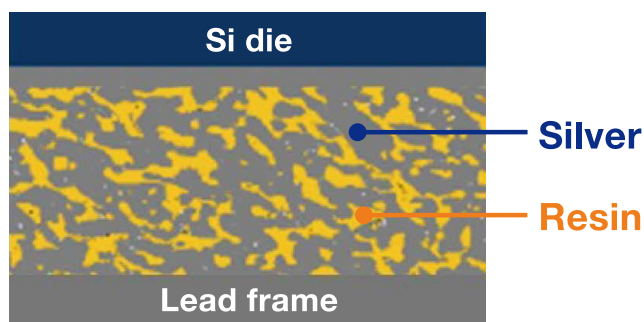
Silver Sintering Paste

Features

- Pressureless Die Attach Materials
- Excellent bonding to Cu
- Good reliability to Cu
- High thermal conductivity
- RoHS Compliance & Pb solder replacement

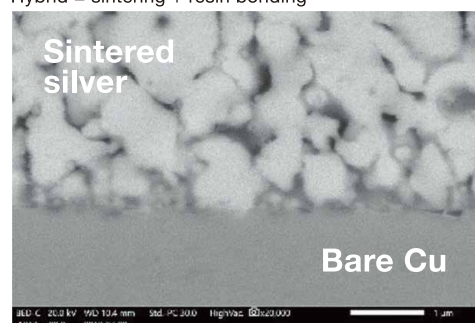


Structure of hybrid sintering



Silver : bonding & high thermal conductivity
Resin : reduce cooling stress

Hybrid = sintering + resin bonding



Silver forms metal bonding with Cu surface

Reliability (Temperature cycle)

SAT images	Die side	Cu LF side
0 X		
2000 X		

Die attach : TS-9853

Die/frame : 7×7mm Au-sputtered Si die/Bare-Cu LF

Cure profile : 200°C 60min / 250°C 60min in N₂

Cycle test condition : -55 ⇄ 150°C for 30min/cycle



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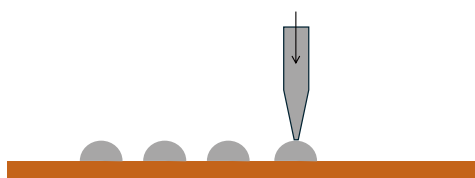
Characteristics

	TS-9853G	TS-9854H
Process	Dispensing	Printing
Viscosity	20 Pa.s	40 Pa.s
DSS at RT	45 MPa	40 MPa
Elastic modulus at RT	14,000 MPa	15,000 MPa
CTE	26 ppm/K	28 ppm/K
Volume resistivity	10 $\mu\Omega\text{cm}$	10 $\mu\Omega\text{cm}$
Thermal conductivity	130 W/m.K	120 W/m.K
Metallization	Ag, Au, Cu	Ag, Au, Cu
Substrate	LF, DBC/AMB, PCB	LF, DBC/AMB, PCB
Bond area	8mm $\times$ 8mm	8mm $\times$ 8mm

Application process



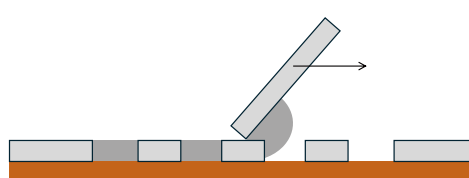
Dispensing



Adaptable to a variety of processes



Stencil printing



TANAKA
TANAKA PRECIOUS METALS

For more detail

