

Pd Coated Soft FAB Type ; TC-ZS-1

Feature & Advantage

- ◆ Soft FAB
→ Less chip damage and Al splash than conventional PCC wire.
- ◆ Good 2nd bond ability
→ Better bond ability than conventional bare Cu wire.
- ◆ High reliability & Long floor life
→ Higher reliability & longer floor life than conventional bare Cu wire.

Mechanical Property

	0.7mil (18um)	0.8mil (20um)	0.9mil (23um)	1.0mil (25um)	1.2mil (30um)	1.5mil (38um)	2.0mil (50um)
Breaking Load (gf)	4.0-7.5	5.5-10.0	7.5-13.0	8.5-15.5	12.5-21.5	21.0-33.0	39.0-59.0
Elongation (%)	≥4	≥4	≥4	≥5	≥8	≥12	≥14

Physical Property

Young's Modulus (GPa)	71
Coefficient of Thermal Expansion ($\times 10^{-6}/\text{degC}$)	16.6
Resistivity ($\mu\Omega \text{ cm}$) @20degC	1.8
Density (g/cm^3)	8.93



Pd Coated Soft FAB Type ; TC-ZS-1

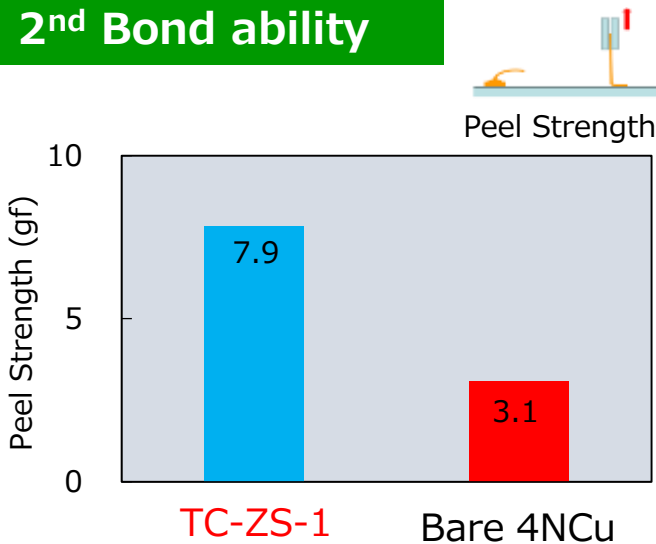
Soft FAB

Vickers Hardness of FAB

TC-ZS-1	62
Conventional PCC	75
Tatsuta 4NCu	58
Tatsuta 4NAu	43



2nd Bond ability

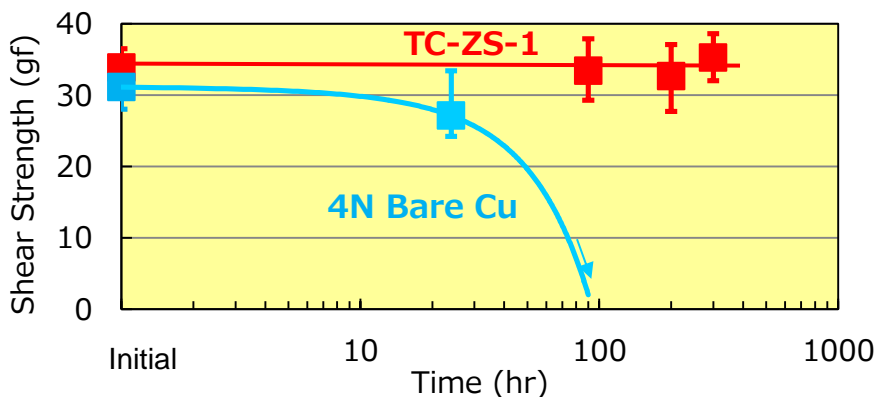


<Measuring Condition>

Wire bonder : UTC1000super
 Wire dia. : 0.9mil
 Stage Temp. : 200degC
 2nd bond : Force 50gf
 Lead Frame : Cu Alloy (Ag plating)

Better 2nd bond ability than bare Cu wire

Reliability (HAST / 1st bond)



<Test Condition>

Wire Bonder : UTC-1000 Super
 Wire dia. : 0.9mil
 Stage Temp. : 200degC
 Pad : Al-Si-Cu 1.6umt
 1st Bond : Force 25gf
 Mold : Unmold compound
 HAST : 130degC/85%RH

TC-ZS-1 shows good reliability than 4N Bare Cu in HAST .

