

Bare Cu Alloy Soft FAB Type ; MCX

Feature & Advantage

- ◆ **Soft FAB**
→ Less chip damage and Al splash than Pd Coated Cu wire.
- ◆ **Stable FAB size**
- ◆ **Good 2nd bond ability**
- ◆ **High reliability**
→ MCX reliability is better than conventional bare Cu wire, same as Pd Coated 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)	3.5-7.5	4.5-8.5	7.0-12.0	8.0-14.0	12.5-19.5	20.5-30.5	39.5-55.0
Elongation (%)	≥7	≥7	≥9	≥9	≥9	≥14	≥17

Physical Property

Young's Modulus (GPa)	75
Coefficient of Thermal Expansion ($\times 10^{-6}/\text{degC}$)	16.5
Resistivity ($\mu\Omega$ cm) @20degC	1.8
Density (g/cm ³)	8.93



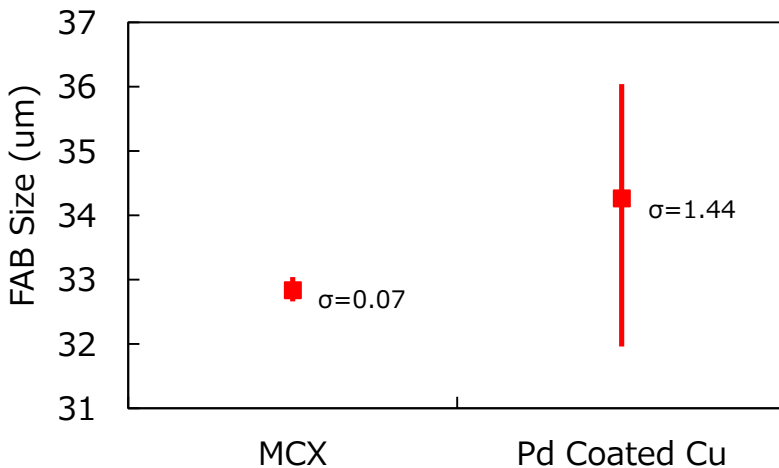
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Soft FAB

Vickers Hardness of FAB

MCX	58
Tatsuta 4NCu	59
Tatsuta Pd Coated Cu	62
Tatsuta 4NAu	43

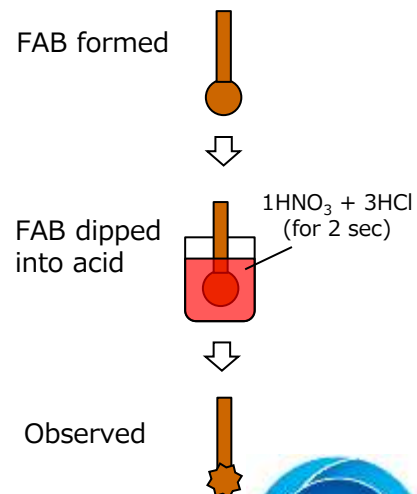
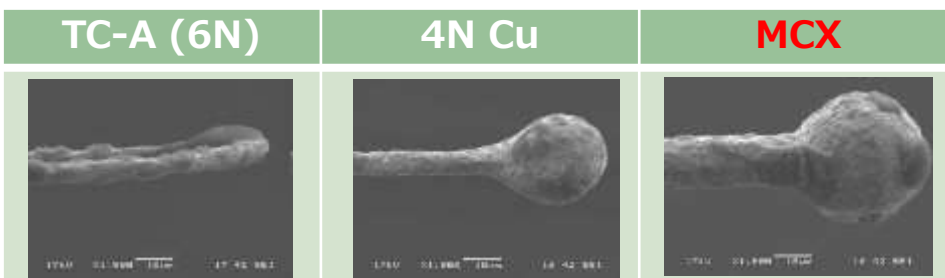
Stable FAB Size



<Measuring Condition>
 Wire bonder : UTC1000super
 Wire dia. : 0.8mil
 Gas : 5%H₂-95%N₂
 Gas Flow : 0.46L/min.
 Sample : n=100

MCX FAB size is more stable than that of PCC

Reliability (Strong for Acid)



MCX shows good anti-corrosion in a low pH solution.

