

High Purity & Cost Effective Type ; TC-GE

Feature & Advantage

Cu Purity of TC-GE → 6N (>99.9999%) – 5N (>99.999%)
↕
Conventional Cu wire → 4N (>99.99%)

Soft FAB

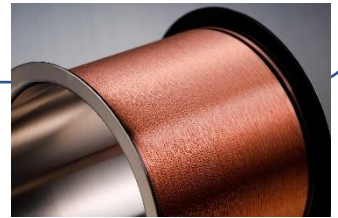
Less chip damage and Al splash than conventional Copper wires

Ultra low Cl / S & No P dopant

TC-GE contains extremely small amount of Cl / S which can trigger wire hardening and corrosion.

TC-GE contains no P what trigger wire corrosion.

→ TC-GE ; high reliability



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)	3-7	4-8	5-11	6-14	10-18	17-27	33-47
Elongation (%)	≥4	≥5	≥7	≥8	≥8	≥11	≥14

Physical Property

Young's Modulus (GPa)	54
Coefficient of Thermal Expansion ($\times 10^{-6}/\text{degC}$)	16.5
Resistivity ($\mu\Omega$ cm) @20degC	1.7
Density (g/cm ³)	8.93



High Purity & Cost Effective Type ; TC-GE

Soft FAB

Vickers Hardness of FAB

TC-GE (5N Cu)	55
Tatsuta 4NCu	59
Tatsuta Pd Coated Cu	62
Tatsuta 4NAu	43

Typical Impurity Components

Unit:ppm

	TC-GE (lot 1)	TC-GE (lot 2)	TC-A
Cl	< 0.005 (ND)	< 0.005 (ND)	< 0.005 (ND)
Ag	0.12	0.06	0.13
S	0.08	0.6	0.01
Fe	0.03	0.09	0.008
P	< 0.001 (ND)	< 0.001 (ND)	< 0.001 (ND)
.
Total	0.29	1.11	0.21

TC-A → 6NCu (>99.9999%)

TC-GE → 6NCu (>99.9999%) – 5NCu (>99.999)



Advantage Image

