

Super Elongation C5240 (SE) Alloy

In response to the demand of miniturization and lightweighting of electronic components and parts, Kiyomine Metal Industry began the mass production of high strength C5240(SE) alloy compared with C5210 alloy which have been widely used for springs and connectors as dependable metallic material .

Our C5240(SE) alloy was manufactured from Perfect Ready-Grain Process. Therefore, this alloy satisfies both high strength and the bend character.

I. Chemical Composition

wt%					
Cu	Pb	Fe	Sn	Zn	P
—	0.02以下	0.10以下	9.0~11.0	0.20以下	0.03~0.35

※Cu+Sn+P Min 99.5

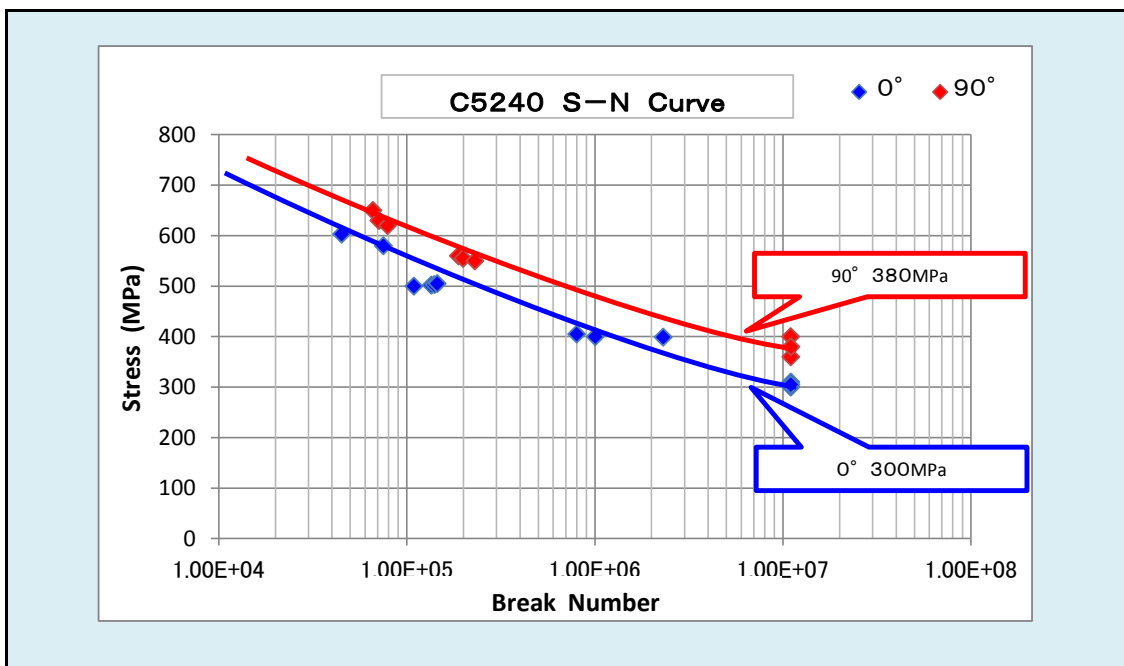
II. Physical Properties

Meiting Point (solidus)	999°C
Specific Gravity	8.78
Coefficient of thermal Expansion	$18.4 \times 10^{-6} / K$
Thermal Conductivity	50W/m·K
Electrical Conductivity	10%IACS
Specific Heat	375J/Kg·K
Modulus of Elasticity	105000N/mm ²

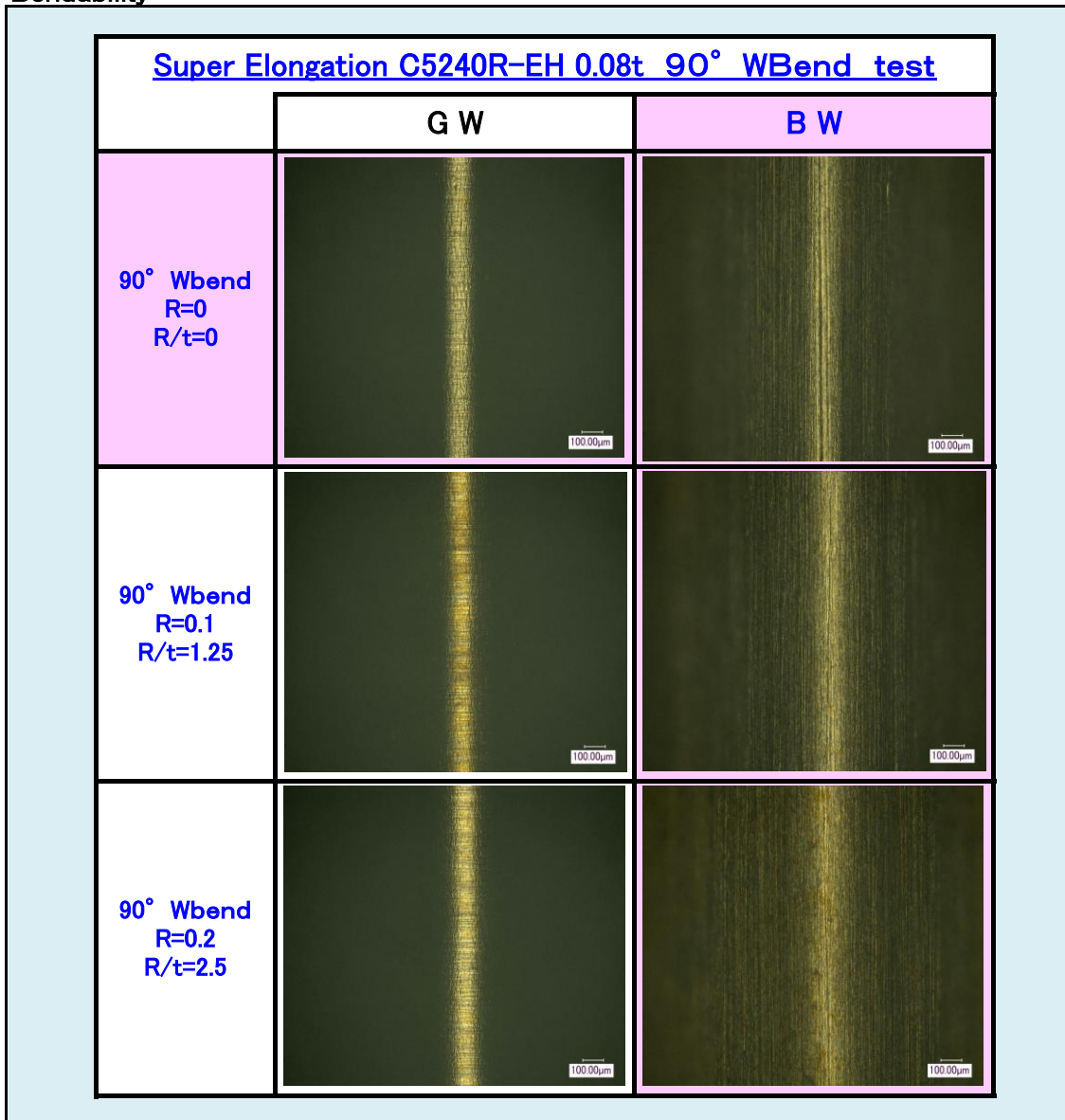
III. Mechanical Properties

Hard	H	EH	SH	ESH	XSH
Tensile strength N/mm ²	650~750	750~850	850~950	min950	min1000
0.2%Yield strength N/mm ²	min510	min630	min750	min870	min930
Elongation %	min 18	min 14	min 7	—	—
Hardness Hv	200~240	230~270	250~300	min270	min290

IV. Fatigue Property



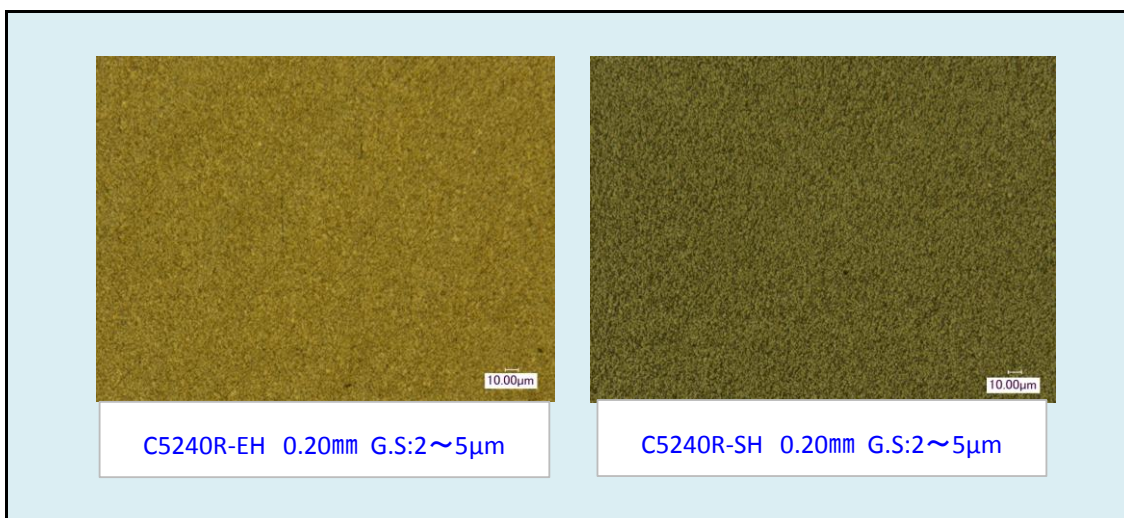
V. Bendability



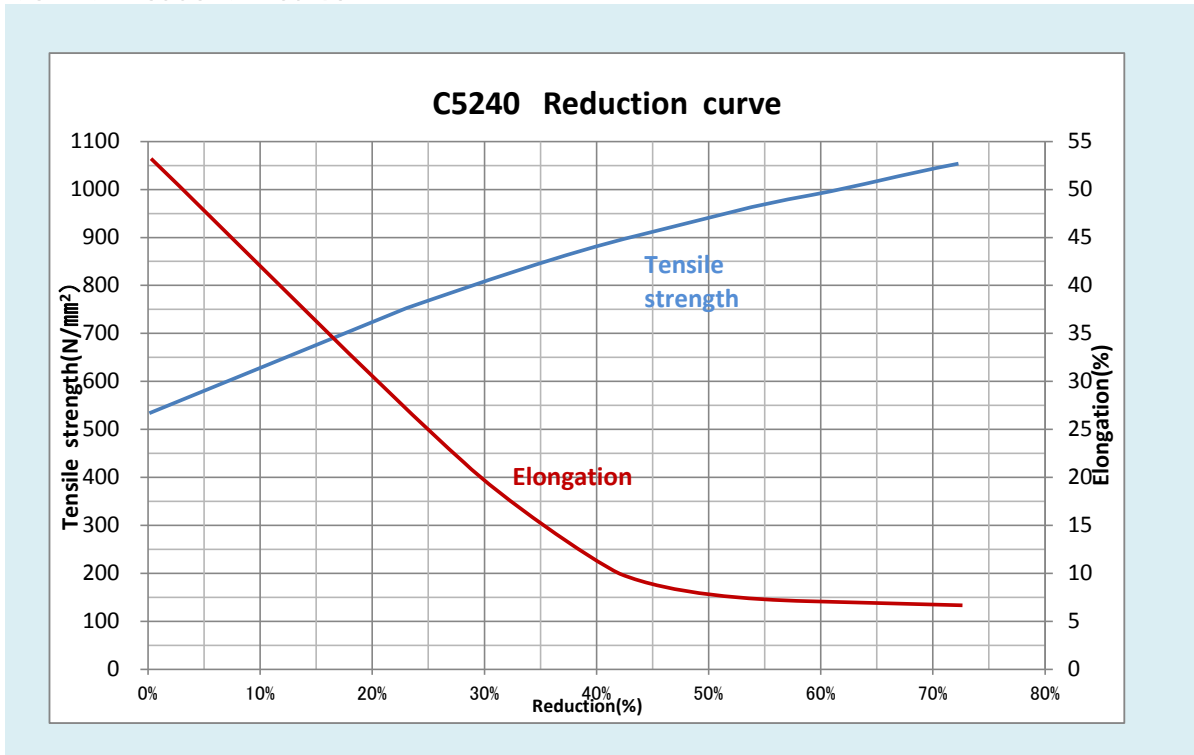
VI. C5240(SE) Perfect Ready-Grain Process

KIYOMINE'S C5240(SE) is made by Perfect Ready-Grain Process.

Therefore, Our C5240(SE) can satisfy high strength and superior bendability.



VII. C5240 Reduction curve



VII. Plating characteristics and solder wettability of Kiyomine metal's C5240 alloy are equal to that of 3~8%Sn-phosphor bronze.

We made this catalogue based on data as of October, 2013. When we improve the performance of the product, we have a case to change the product specification without notifying the user.

[Inquiry]

Kiyomine Metal Industry Co., LTD.

〒 111-0051

2-13-5, Swallow tower 7floor Kuramae, Taitou-ku, Tokyo

TEL: +81358215511 FAX: +81358215522