

# 活性金属ろう材 TKC-661

## Active-Brazing Alloy Metal

### 特長 Features

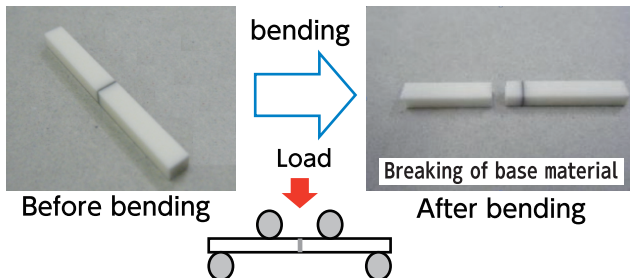
- ◆ セラミックスにダイレクトに接合(メタライズ層不要)  
Join ceramics and metals without metalized layer
- ◆ 板、ワイヤでの供給が可能  
Delivered by plate or wire
- ◆ 厚み：製品単体 50 $\mu$ m以上、銅とクラッドした場合のろう材層20 $\mu$ m  
Thickness: Min.50 $\mu$ m by itself & 20 $\mu$ m on Cu clad metal

### 用途例 Use case

- ◆ パワー半導体用セラミック基板  
Ceramic Substrate for power electronics
- ◆ セラミックパッケージ封止用  
Sealing the ceramic package  
(サイズおよび形状により異なる) (Depending on size and shape)

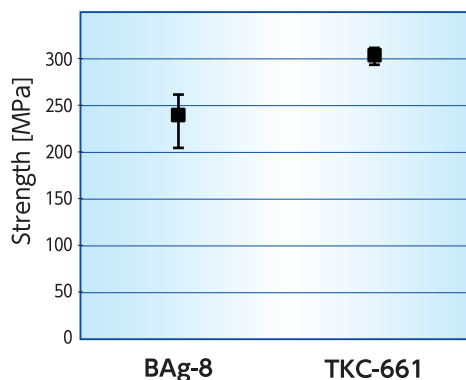
### 特性 Characteristics

- ◆ 4点曲げ破断強度測定  
Result of 4 point bending test



#### <Test result>

- \* Strength  
- TKC-661 > BAg-8 (metalized ceramics)
- \* Breaking of base material  
- Keep enough strength



- ◆ BAg-8との比較  
Comparison with BAg-8

	Product name	
	TKC-661	BAg-8
Content [wt%]	Ag66.0Cu29.5Ti1.5SnBal.	Ag72.0CuBal
Specific Gravity	9.7	10.0
Solidus line [°C]	745	780
Liquids line [°C]	780	780
Vickers hardness [Hv.]	113	90
U.T.S. [MPa]	356	294
Young's modulus [GPa]	85.0	97.0
Coefficient of Linear expansion [ $\times 10^{-6}/^{\circ}\text{C}$ ]	18.6	17.1
Thermal Conductivity [W/mK]	102.0	311
Joint of Ceramics	○	×
Product Forms	Thickness : >0.05mm Width : <140mm	-

