

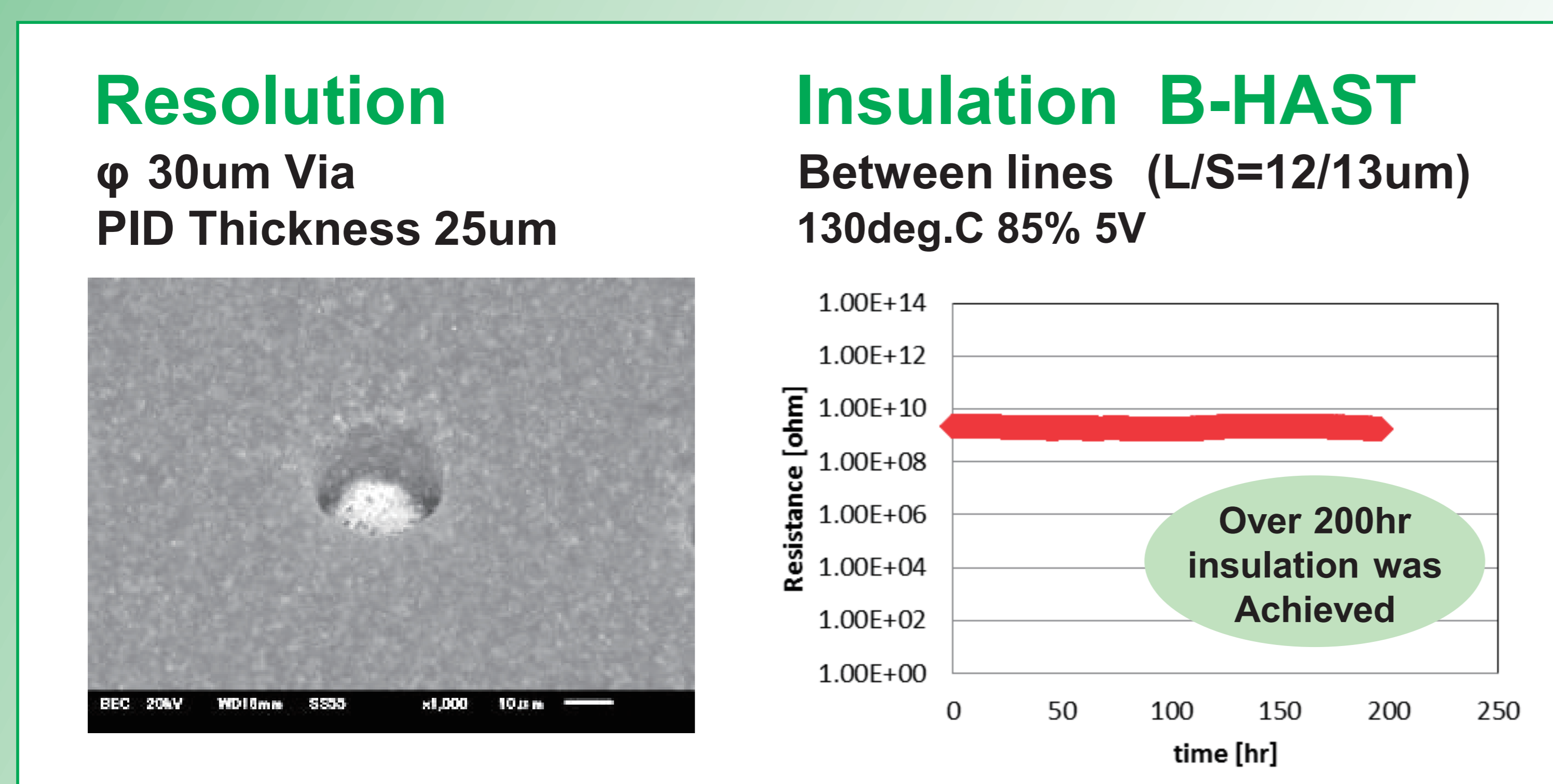


# 層間絶縁材料 Dielectric Material

## SAP対応感光性層間絶縁材料 PVI-1 EL100 Series

- Features**
  - **Smaller Via opening**
  - **High insulation reliability**
  - **Excellent Peel Strength**

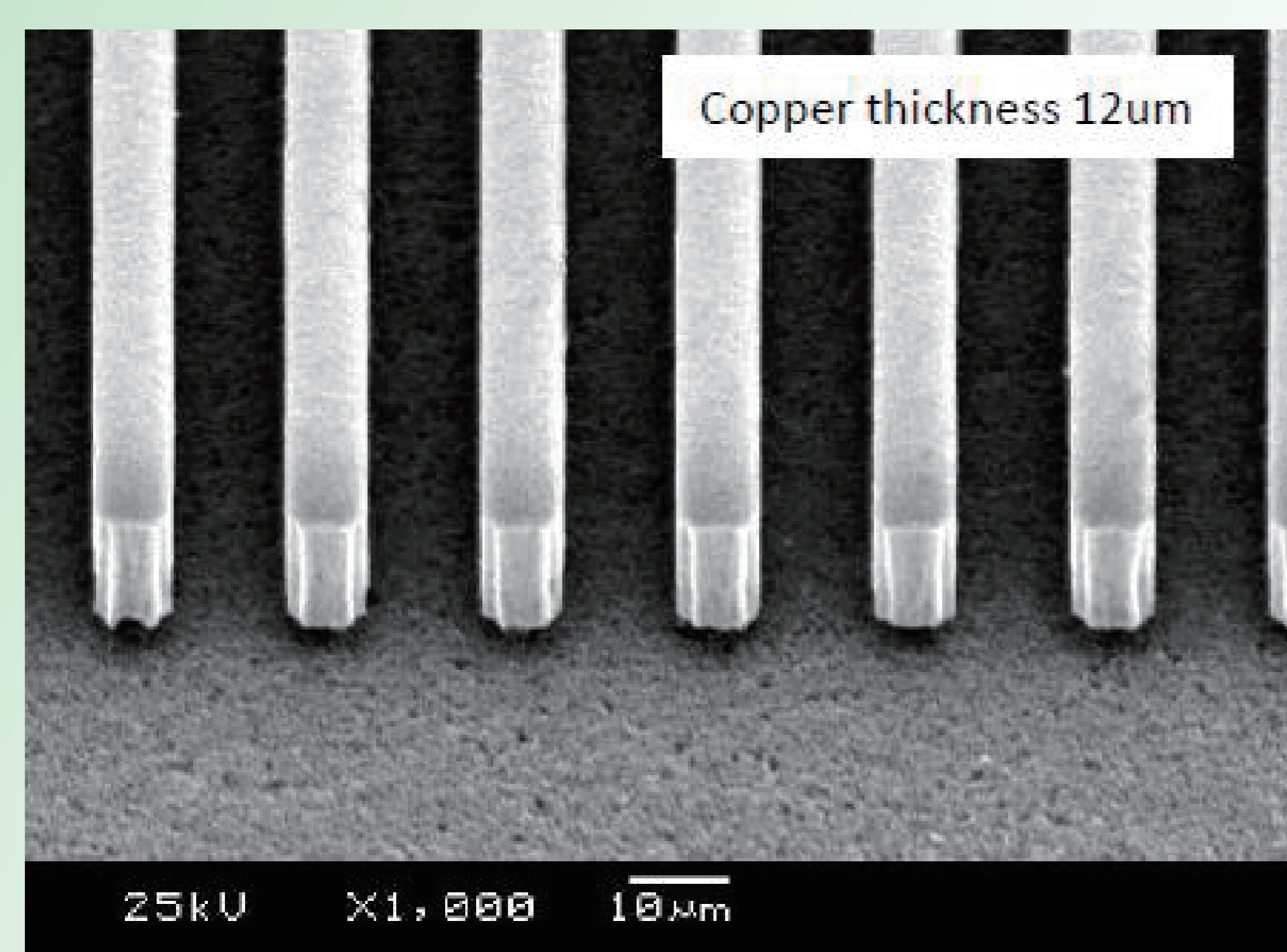
### PVI-1 EL100 (Desmear Compatible Model)



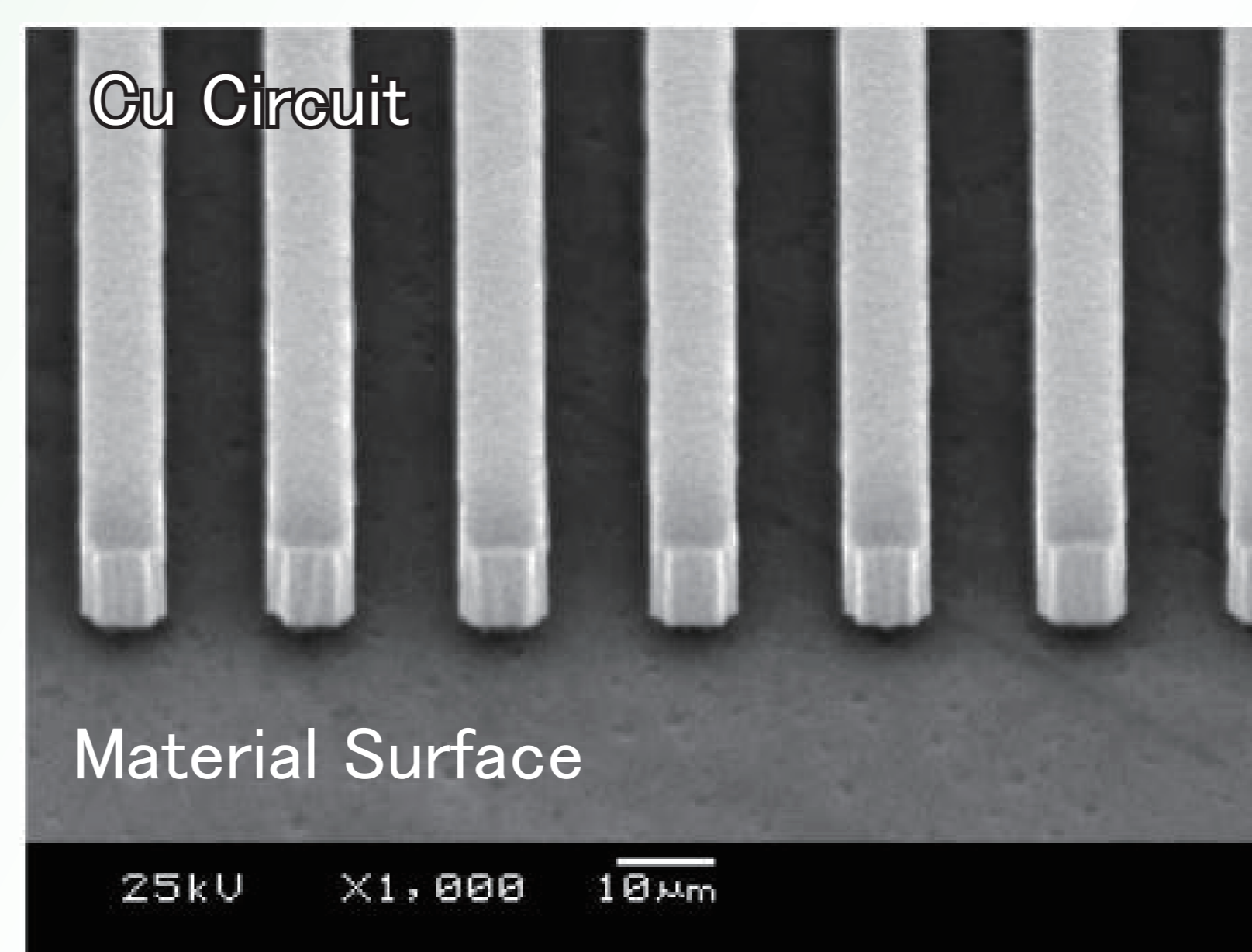
Test Items	PVI-1 EL100	Unit
Tg (TMA)	190-195	(deg.C)
CTE (alpha 1)	40-45	(ppm)
Elastic Modulus	3.5-4.0	(GPa)
Tensile Strength	80-85	(MPa)
Elongation	4.0-4.5	(%)
Peel Strength	4.0-5.0	(N/cm)

## SAP対応熱硬化型層間絶縁材料 Zaristo 125 / Zaristo 517X

- Features**
  - **Suitable for Conventional SAP**
  - **LtL & L/S BHAST stability**

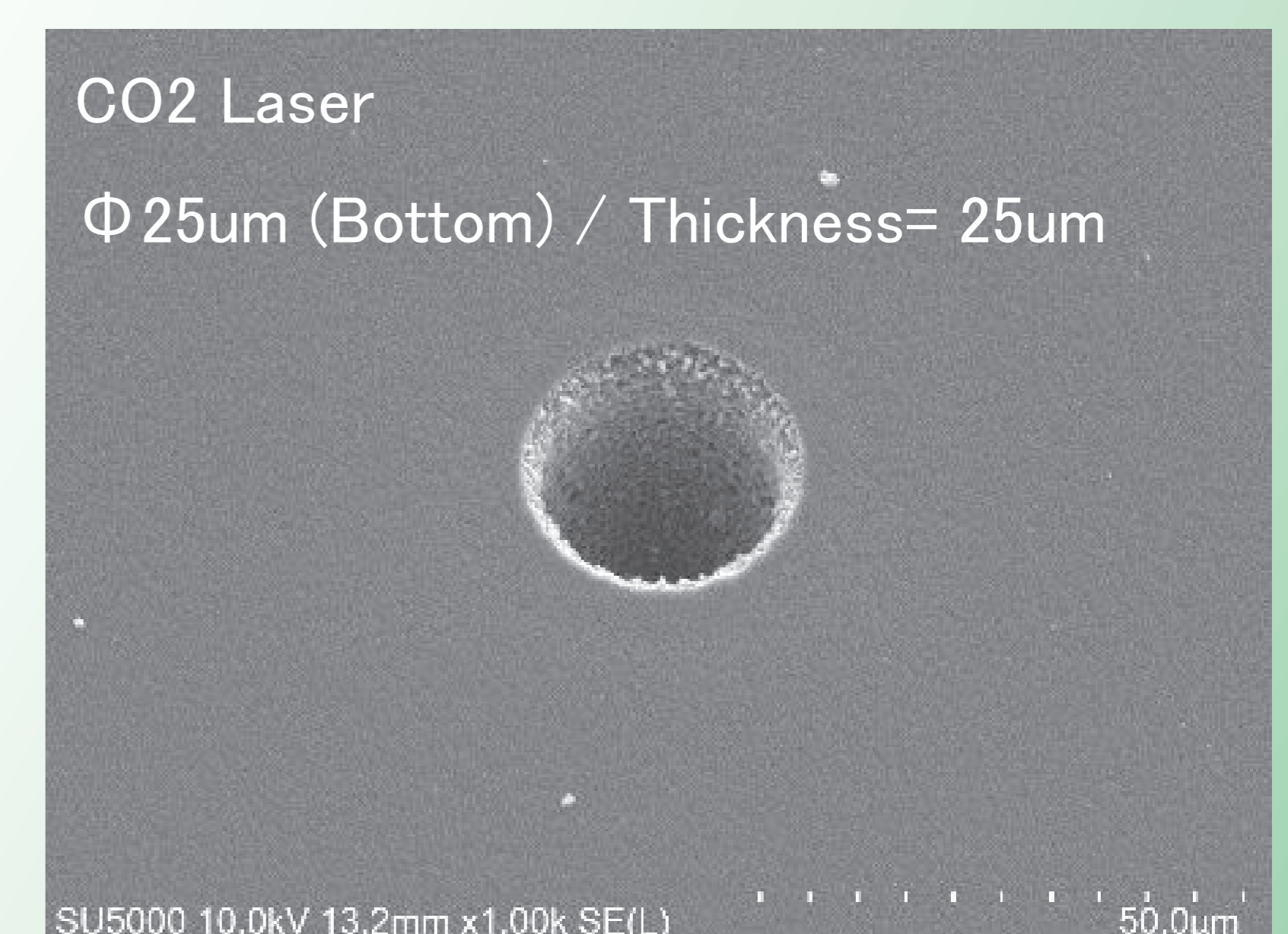


Zaristo 125



Zaristo 517X

Fig. L/S = 10/10um on BU surface (Using Conventional SAP)



Zaristo 517X

Fig. SEM image of After desmear

Test Items	Zaristo125	Zaristo 517X	Unit
Target application	SAP for Conventional BGA	SAP for Server	
Tg (TMA)	165-175	165-175	deg.C
CTE (alpha 1)	25-30	17	ppm
Dk / Df (10GHz, SPDR method)	3.4 / 0.015	3.4 / 0.004-0.0049	
Peel Strength / Ra after Desmear	> 5.0 / 0.25-0.4	> 4.0 / 0.2-0.25	N/cm / um