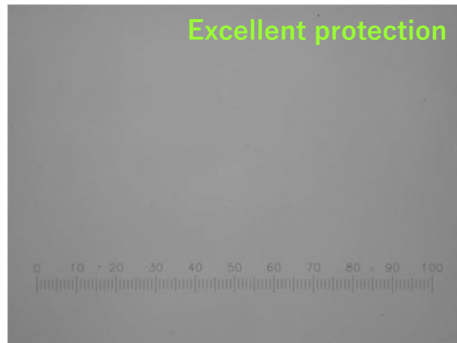


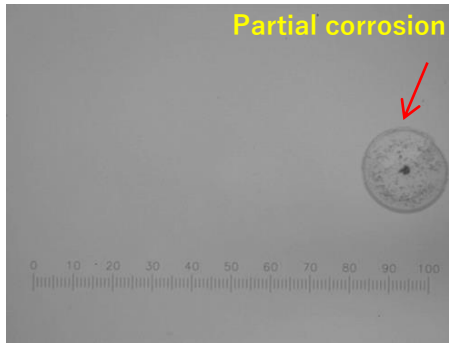
Ya coat

Special Environment >400°C Ceramic composite Film

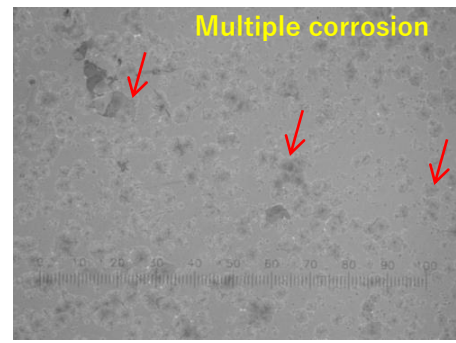
Corrosion gas at high temperature exposure test (ClF₃:trifluorochlorine)



Excellent protection



Partial corrosion

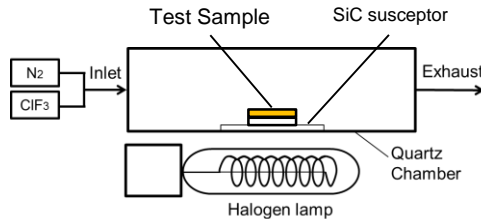


Multiple corrosion

Ya coat

CVD-Y₂O₃ coat

CVD-Al₂O₃ coat



Test conditions

Temperature : 600°C

Gas flow rate : 100% ClF₃ 50sccm

Time : 10min

※Comparison sample under test conditions

1) Quartz glass is etched > 35 μm

2) The silicon substrate is heated very hot and is observed as red (1400~1800°C)

Comparison chart

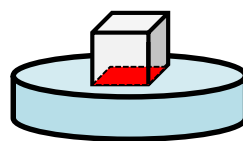
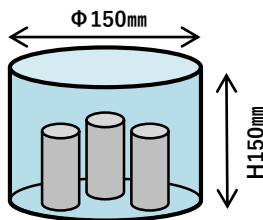
Type	Quality			Characteristic	
	Crystalline	Transparency	Cracks	Corrosion gas Resistant	Crystallization temperature
Ya coat	Amorphous	Excellent	Excellent	Excellent	≧ 900°C
CVD-Y ₂ O ₃	Multicrystal	Excellent	Poor	Good	—
CVD-Al ₂ O ₃	Amorphous	Excellent	Good	Poor	> 400°C

Ya coat process condition

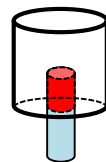
- Process temperature : 500°C
- Maximum size : Φ150mm × H150mm
- Substrate material : Quartz glass, Ceramics, Metal

Substrate mounting method

No film is formed on the installation surface (■ area)
There may be a thin film on the boundary line



Setting on a truntable



Hanging or inserting into a jig

The above data presents reference values that are not guaranteed