

Product Specification

Product:	Heating Resistor Paste For Silicon Nitride (Si_3N_4) Ceramic Substrates
Part Number:	05H71

Application Scope :

This product is suitable for silicon nitride ceramic heating circuit.

Compatible with 01H-7103 electrode silver paste

Usage Conditions :

Substrate	Silicon nitride ceramics
Printing	200-250 mesh screen printing
Leveling	Let it level at room temperature for 5-15 minutes (adjust time based on actual leveling conditions).
Drying	Bake in a ventilation oven at 100-150°C for 10-15 minutes (if the baking temperature is below 300°C, the baking time may be adjusted according to actual conditions).
Firing Condition	The sintering temperature is 800°C (recommended value) and the sintering time is 10 minutes.
Thinner	ST1001

Characteristics :

1. Paste Characteristics :

Characteristic	Standard	Test Method And Conditions
1 Fineness	$\leq 8\mu\text{m}$	FOG test
2 Viscosity	120-280Pa.s	Brookfield HBT (Boli Fei) viscometer, rotor SC4-14/6R, operating at 10 rpm, with viscosity adjustable to $25\pm 1^\circ\text{C}$ according to user requirements.

2. Characteristics After Curing :

Under the 1-sintering condition, the film thickness is 8-12 μm .

Check fired film produced under the conditions specified in 1) , (Film thickness is 8-12 μm .)

Characteristics		Standard	Test Method And Conditions
3	Appearance	Compact and dense	Eyeballing
4	Resistivity	As below form	Standard film thickness: 10 μm
	Temperature Coefficient (TCR)	As below form	HTCR 25-125°C

Product Line	Heating Resistor Paste For Silicon Nitride (Si ₃ N ₄) Ceramic Substrates			
P/N	Resistivity (Ω/□)	TCR (ppm/°C)	Sintering Temperature °C	Viscosity (kcps)
05H71-0R02012	0.02	1200	800	120-280
05H71-0R03012	0.03	1200		
05H71-0R05012	0.05	1200		
05H71-0R10012	0.10	1200		
05H71-0R20012	0.20	1200		
05H71-0R30012	0.30	1200		
05H71-0R50012	0.50	1200		
05H71-1R00012	1.00	1200		
05H71-3R00012	3.00	1200		
05H71-4R00012	4.00	1200		
05H71-5R00012	5.00	1200		
05H71-011	10.00	1200		

Save Conditions And Validity Period :

The product shall be stored in a sealed container at an ambient temperature of 5-25°C, with a shelf life of six months from the date of shipment.

Packaging Method :

1000g/can