Product Specification

Product:	Heating Resistor Paste For Alumina (Al$_2$O$_3$) Ceramic Substrates
Part Number:	05M18

Application Scope :

This product is suitable for alumina ceramic heating circuit.

Usage Conditions :

Substrate	Alumina 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 based on actual conditions).
Firing Condition	The sintering temperature is 600°C (recommended value) and the sintering time is 10 minutes.
Thinner	ST1001

Characteristics :

1. Paste Characteristics :

	Characteristic	Standard	Test Method And Conditions
1	Fineness	≤8μm	FOG test
2	Viscosity	120-280Pa.s	Brookfield HBT (Boli Fei) viscometer, rotor SC4-14/6R, operating at 10rpm and 25±1°C, with adjustable viscosity 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 8-12μm.)

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 Aluminum Substrates			
P/N	Resistivity (Ω/□)	TCR (ppm/°C)	Sintering Temperature °C	Viscosity (kcps)
05M18-0R01012	0.01	1500	600°C	120～280
05M18-0R02012	0.02	1200		
05M18-0R03012	0.03	1200		
05M18-0R05012	0.05	1200		
05M18-0R10012	0.10	1200		
05M18-0R20012	0.20	1200		
05M18-0R30012	0.30	1200		
05M18-0R50012	0.50	1200		
05M18-1R00012	1.00	1200		
05M18-3R00012	3.00	1200		
05M18-4R00012	4.00	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