

## Product Specification

Product:	Conductive Silver Paste
Part Number:	01M-3405

### Application Scope :

This product is suitable for PTC resistor electrodes.

### Usage Conditions :

Substrate	PTC pottery and porcelain
Printing	200-300 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 (the test temperature should not exceed 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. The slurry has a broad sintering temperature range, adjustable between 480-750°C as needed, with the peak temperature maintained for 10 minutes.
Thinner	ST-1000

### Characteristics :

#### 1. Paste Characteristics :

Characteristic	Standard	Test Method And Conditions
1 Fineness	$\leq 5\mu\text{m}$	FOG test
2 Viscosity	80-280Pa.s	Brookfield HBT (Boli Fei) viscometer, rotor model 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  $\mu\text{m}$ .

Check fired film produced under the conditions specified in 1) , (Film thickness is 8-12 $\mu\text{m}$ .)

Characteristics	Standard	Test Method And Conditions
3 Resistivity	$\leq 5\text{m}\Omega/\square$	Test pattern 0.6mm×60mm
4 Adhesion Strength		Peel Test: 0.5mmφ Tin plated Cu wire soldered on 2mm×2mm Pad. Solder: 96.5Sn/0.5Cu Mildly activated flux used.
Initial Adhesion	$\geq 43.2\text{N}$	
Ageing Adhesion	$\geq 23.6\text{N}$	Aging conditions: 150°C, 24 hours

#### 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 1 year from the date of shipment.

#### Packaging Method :

Standard packaging, 1000g/can; samples are available in 200g small can packaging.

Compound Name	Mass Percentage (%)
Silver	70—75
Glass and Inorganic Additives	2-5
Aluminum Oxide	<0.03
Silicon Dioxide	<0.04
Zinc Oxide	<1.5
Boron Oxide	<0.06
Bismuth Oxide	<1.0
Barium Oxide	<0.02
Copper Oxide	<0.8
Ethyl Cellulose	<2.5
Diethylene Glycol Butyl Ether Acetate	<20