

## Product specification

|              |                         |
|--------------|-------------------------|
| Product:     | Conductive silver paste |
| Part number: | 01M-1805                |

### Application scope :

This product is suitable for alumina ceramic electrode.

### Usage conditions:

|                  |                                                                                                                                                                                                                                                                                                                 |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Substrate        | Alumina ceramic                                                                                                                                                                                                                                                                                                 |
| Printing         | 200-300 mesh screen printing                                                                                                                                                                                                                                                                                    |
| Leveling         | Let it level at room temperature for 5-15 minutes (depending on the actual leveling situation).                                                                                                                                                                                                                 |
| Drying           | Bake in an oven at 100-150°C for 10-15 minutes (if the test temperature is below 300°C, adjust the baking time accordingly).                                                                                                                                                                                    |
| Firing Condition | Sintering in a tunnel furnace under air atmosphere at a peak temperature of 600°C (recommended) for 10 minutes. The sintering temperature of the slurry is very wide, and the sintering range can be adjusted within 480-750°C according to the actual needs, but the peak temperature time must be 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 viscometer (Rotor SC4-14/6R), 10 rpm, with viscosity adjustable to $25\pm 1^\circ\text{C}$ according to user requirements. |

#### 2. Characteristics after curing:

Under sintering conditions 1, the film thickness ranges from 8 to 12 microns. 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 $\times$ 60mm                                                                                                 |
| 4 Adhesion      |                                | Peel Test: 0.5mm $\phi$ Tin plated Cu wire soldered on 2mm $\times$ 2mm Pad.<br>Solder: 96.5Sn/0.5Cu Mildly activated flux used. |



## Sryeo Electronic Paste Co., Ltd.

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|                     |                     |                                   |
|---------------------|---------------------|-----------------------------------|
| Initial<br>adhesion | $\geq 43.2\text{N}$ |                                   |
| Adhesion<br>aging   | $\geq 23.6\text{N}$ | Aging conditions: 150°C, 24 hours |

### Save conditions and validity period :

The product should be stored in a sealed environment at 5-25°C. The shelf life is 1 year from the date of shipment.

### Packaging method:

Standard packaging: 1000g per can. Samples are available in 200g small cans.