



Product Specification

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| Product: | Alumina Ceramic Heating Resistor Paste |
| Part Number: | 55H18 |

Application Scope :

This product is suitable for alumina ceramic heating circuit.

Usage Conditions :

| | |
|-------------------|--|
| Substrate | Alumina ceramic |
| 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). |
| Drying &Sintering | <p>① Single-layer printing (alumina plate) Furnace drying at 100-150°C for 10-15 minutes Sintering in an atmosphere of tunnel furnace air, peak temperature 850~1000°C (recommended value), 10 minutes</p> |
| Drying &Sintering | <p>② Multilayer printing (alumina green porcelain) Remove the adhesive at a temperature range of 200-500°C for a minimum of 60 minutes. The sintering temperature is 1300~1450°C (recommended value) and the sintering time is 2-8 hours. The sintering temperature may be increased as needed, but it should generally not exceed 1500°C.</p> |
| Thinner | ST1001 |

Characteristics :

1. Paste Characteristics :

| Characteristic | Standard | Test Method And Conditions |
|----------------|----------|----------------------------|
| 1 Fineness | ≤8μm | FOG test |



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|---|-----------|-------------|--|
| 2 | Viscosity | 120-280Pa.s | Brookfield HBT (Boli Fei) viscometer, rotor SC4-14/6R, 10 rpm, with adjustable viscosity at 25±1°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 8-12µm.)

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

| Product Line | Platinum Heater Paste | | | | |
|---------------|-----------------------|-------------------|--------------|-----------------------|------------------|
| | P/N | Resistivity (Ω/□) | TCR (ppm/°C) | Sintering Temperature | Viscosity (kcps) |
| 55H18-0R06030 | 0.06 | | | | |
| 55H18-0R07030 | 0.07 | | | | |
| 55H18-0R08030 | 0.08 | | | | |
| 55H18-0R09030 | 0.09 | | | | |
| 55H18-0R10030 | 0.10 | | | | |

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