Heraeus

C5735 Conductors

Description

C5735 is a gold conductor paste that has been formulated for use with Au wire bonding applications. C5735 is a screen printable paste that gives an extremely dense and defect-free fired film. Fine lines are able to be printed down to 75 μ m lines and spaces with etching possible for ultrafine features down to 25 μ m.

Key Features

- Excellent Au bondability
- High conductivity
- Fine line printing
- Etchable (Chemical and laser)



This picture does not show the packaging of C5735 and is solely intended for illustration purposes. The products are available in different packaging configurations and may change over time. Please refer to the latest safety data sheets for safety-relevant pictograms.

Electronics

Typical Properties (Paste)		
Resistivity	$\leq 4.5 \text{ m}\Omega/\Box$ at 10 µm fired film thickness using 25 mil wide serpentine conductor pattern	
Viscosity	300 – 530 Kcps, Anton Paar Physica MCR101, CP25-1, 4sec-1, 25 °C	
Au Wire Bondability	1.25 mil Wire, 99.99% purity, Elongation limit 2.0 – 7.0% 96 % Al ₂ O ₃ Initial: >12g	
Solids	84.5 ± 1 %	
Coverage	118 cm²/g @ 10 μm fired film thickness	

The descriptions and engineering data shown here have been compiled by Heraeus using commonly-accepted procedures, in conjunction with modern testing equipment, and have been compiled as according to the latest factual knowledge in our possession. The information was up-to date on the date this document was printed (latest versions can always be supplied upon request). Although the data is considered accurate, we cannot guarantee accuracy, the results obtained from its use, or any patent infringement resulting from its use (unless this is contractually and explicitly agreed in writing, in advance). The data is supplied on the condition that the user shall conduct tests to determine materials suitability for particular application. The Heraeus logo and Heraeus, figurative mark are trademarks or registered trademarks of Heraeus Holding GmbH or its affiliates. All rights reserved.

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Recommended Processing Guidelines		
Printing	325 – 400 mesh stainless steel screen 0.3 – 0.5 mil emulsion 1.1 mil wire	
Settling	A settling time of 10 – 15 minutes is recommended. Parts should be dried as soon as possible after the setting period, (within 20 minutes), so the paste does not skin over. Parts should not be left out for long periods of time before drying. This allows the paste to skin over and can compromise adhesion. Wet parts should be covered if not dried right away.	
Drying	150 °C for 10 minutes Make sure ventilation is sufficient to prevent the wet film from skinning	
Firing	850 °C peak temperature, 10 minutes at peak Total cycle time of 45 – 60 minutes	
Thickness	$\begin{array}{llllllllllllllllllllllllllllllllllll$	
Thinner	RV-507	
Compatibility	IP9217, IP9227 multilayer dielectrics	

Warranty

Material guaranteed to meet specifications for 6 months from date of shipment.

Storage

Refrigerate at 1 -5°C to ensure shelf life. Allow paste to come to room temperature prior to opening. Spatulate well before using, as settling may occur during storage.

Americas

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