Ormet Circuits, Inc.

TLPS Composition for 7001 Z Axis Interconnect Paste

Product Description

Ormet's patented 7001 via paste enables high density Z-axis interconnects. Ormet enables solid blind and buried vias in the adhesive layer of a typical fabricated printed circuit board. (RF, Flex and Rigid Assemblies)

Product Benefits

- Ormet® Vias can reside in any layer or be used to join two layers
- 3-50 Mil diameter vias are optimum for CO2 lasing and mechanical drilling.
- Ormet® Conductive Pastes are stable due to TLPS Composition Technology.
- Via interconnects are formed during lamination or in a separate thermal process.
- Parallel build allows 100% electrical test before final assembly of all layers.
- Plated interconnects can be eliminated or made more reliable.
- Ormet® Micro Vias can be stacked
- Interconnects to all popular metal finishes.

Environmental Test Condition

A. Humidity (+ 40°C, 95% RH, 10 days) [MIL std. 202E, method 103, cond. A)

B. Solder Float: 550 F, 10 seconds, X5

C. Thermal cycling (- 50°C ↔ + 125°C, 1000 cycles)

Unless otherwise specified, tests and measurements shall be made at ambient temperature and in an atmosphere controlled to less than 80% relative humidity.

Composition Properties	
Viscosity (cp)	200,000
Specific gravity (g/cc)	4.9
Thinner	Butyl Carbitol

Storage and Shelf Life	
Temperature	Shelf Life
-10°C	12 months

Containers should be stored tightly sealed in a clean, stable environment at <10°C. The shelf life of material in unopened containers is shown in the tables. Some settling of solids may occur and compositions should be thoroughly mixed prior to use.
Pot life >24 cumulative hours

Physical Properties	
• Bulk Resistance	30(mΩ/sq.)
Reactive Temperature	165-195ºC
Thermal conductivity	27 (W/m*°K)
Plating compatibility	Electroless or electrolytic
Solderability	Directly solderable
Change in physical properties after environmental tests*	Passes
Out gassing	0.03%
Re-melt of metal network formed during processing	>265°C
TCE (ppm)	22

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