Ceramistan 1031 Semi-Bright Tin Plating Solution

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High-Performance Pure Tin For Ceramic Components Applications

Ceramistan 1031 is a pure tin electrolytic plating bath specially formulated for sensitive ceramic components, connectors, pins, and LED/MELF resistors. The Ceramistan 1031 process produces a dense, small grain deposit that provides excellent solderability, even after exposure to extended steam-age testing. The Ceramistan 1031 process offers several key cost-saving features including reduced coupling, longer bath life, and reduced tin oxidation. Ceramistan 1031 also significantly reduces and can even eliminate spattering during reflow, a problem that often occurs with a standard tin bath.

Ceramistan 1031 process is compatible with all standard barrel and vibratory plating lines, and Technic's patented Spouted Bed Electroplater (SBE[®]).

Features

- Exceptionally stable process
- Long bath life
- Fully analyzable
- Wide current density range
- High tolerance on metallic contaminations
- Non-corrosive
- Flat, dense, uniform grain structure
- Operates at room temperature (20-30°C)

Benefits

- Excellent solderability characteristics
- Deposits are highly whisker resistant
- Halogen and ammonia-free
- Minimizes "coupling" or part agglomeration
- Excellent, smooth, and splatter-free reflow
- Low TCC and TOC content
- No heating required







Technic Multi Process Plating Station for SBE®, Vibratory, and Barrel plating.

Ceramistan 1031

Product Specifications

	US	Metric
Tin Metal	1.6 oz/gal	12 g/l
рН	3.5	3.5
Ceramistan 1031 Complexor	30 % v/v	300 ml/l
Ceramistan 1031 Conductivity Conc.	30 % v/v	300 ml/l
Ceramistan 1031 Additive	5 % v/v	50 ml/l
Ceramistan 1031 Secondary	0.025-0.1% v/v	0.25 – 1.0 ml/l
Temperature	77°F	25°C
Anodic Current Density	0.5 – 10 ASF	0.05 – 1 ASD
Cathodic Current Density	0.5 – 20 ASF	0.1 – 0.5 ASD
Deposition Rate	4 µin/min @ 2ASF	0.1µm/min @ 0.2 ASD
Ceramistan 1031 Complexor to Tin Ratio	20:1	20:1

Solderability - Dip and Look (Sn, Ag, Cu)

Sample Method	Conditions	Dip and Look Cov- erage (P/F)	Visual Appearance	
Barrel	As plated	Р		
Barrel	16-hr bake at 150° C	Ρ		
Barrel	8 Hr steam age	Ρ		SEM HV: 30.00 kV Det: SE VEGAN SEM MAG: 5.00 kx WD: 10.0150 mm 10 µm Techn Date(m/dy): 01/03/13 SM: RESOLUTION S

What our Ceramistan 1031 customers say :

"Excellent product with no downside - highly recommend" "It costs me less and my customers are very happy with the results" "Solderability and deposit appearance has been consistently good"



Ceramistan 1031 grain size