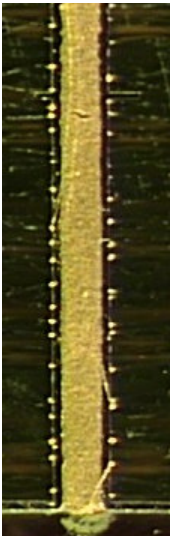




THE POWER OF EI

## Driclad<sup>®</sup> Copper Paste Hole Fill

EI's Driclad<sup>®</sup> Copper Paste Hole Fill with high copper content reduces CTE mismatch and enhances thermal conductivity. This highly plateable material's electrical and mechanical properties meet IPC requirements.



High aspect holes filled with Driclad<sup>®</sup> copper paste

### Features & Benefits

- Low Coefficient of Thermal Expansion (CTE) Reduces CTE mismatch and increases solder joint reliability
- Void Free Filling When used with EI's special lamination process, DC Copper Paste Hole Fill allows void free filling of high aspect ratio PTH's
- Plateable Copper filler encourages plating 'take'
- Low Off Gassing Meets the ASTM E595 off gassing specifications for aerospace requirements
- No Shrinkage Pressurized cure and formulation eliminate shrinkage resulting in flush filling
- Smooth Surface Cured material can be machined smooth for over plating or re-lamination allowing efficient board area utilization
- Crack Resistant Excellent crack resistance ensures reliability of filled PTH's

ENDICOTT  
INTERCONNECT  
TECHNOLOGIES, INC.

1093 Clark Street  
Endicott, New York 13760

Phone: 866-820-4820  
Fax: 607-755-7000



## Driclad<sup>®</sup> Copper Past Hole Fill Properties

Property Tested		Test Method
<b>Electrical</b>		
Permittivity (Dielectric Constant @1 MHz)	8.3	IPC-TM-650/2.5.5.5C
Loss Tangent (Loss Factor @ 1 MHz)	0.028	IPC-TM-650/2.4.41
<b>Thermal</b>		
Glass Transition Temperature (°C), (Minimum)	150	IPC-TM-650/2.4.25
Decomposition Temperature (°C)	320	IPC-TM-650/2.3.40
Flammability	Pass *	UL94-V0
Off Gassing- Total Mass Lost, (TML)%	0.09	ASTM E959-93
<b>Physical</b>		
Resin Type	Multifunctional	
Copper Content, % By Weight	70	EIT/Gravimetric
CTE Below Tg (X,Y,Z) (ppm/C)	35	IPC-TM-650/ .4.41
CTE Above Tg (X,Y,Z) (ppm/C)	110	IPC-TM-650/2.4.41

\* The flame retardant in EI Pramid is TBBPA (RoHS compliant)

\* Boards using VL-V0 laminate materials as hole fill still pass V0