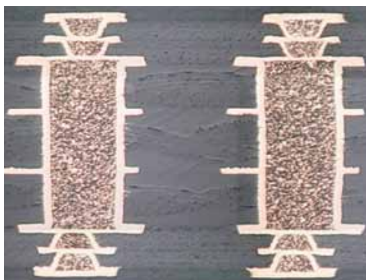
Non-Conductive & Conductive Copper Paste

for Via Filling of Copper Plating Via

DD paste AE1125DS / AE1125HD / AE3030



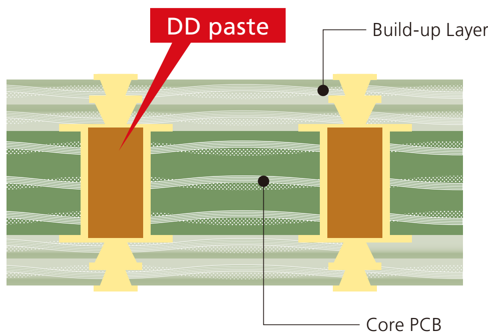
2-4-2 Stacked via type Build-up Multilayer
●Application:Cellular phone ●Paste:AE1125HD

Via in Pad PCB (Thermal Via)
●Application:Package ●Paste:AE3030

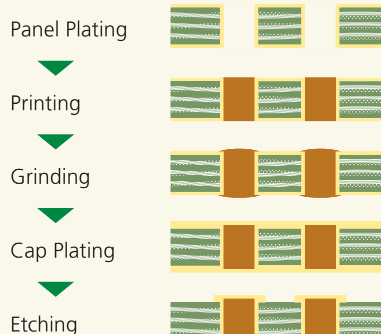
Features

- ▶Superior thermal conductivity
- ▶Void-less
- ▶Superior flatness
- ▶Superior reliability of Cap plating on AE series

Structure



Process



Properties & Characteristic

		Long Life type AE1125DS	Standard type AE1125HD	High Thermal Conductivity type AE3030
Filler		Copper powder	Copper powder	Silver coating Copper powder
Binder		Epoxy resin	Epoxy resin	Epoxy resin
Solvent		Non	Non	Non
Viscosity (BH type) [Pa•s]		140	160	150
Curing condition	Pre-heat	80℃/30min	80℃/30min	60℃/30min
	Post cure	160℃/60min	160℃/60min	160℃/60min
Volume resistivity [Ω•cm]		10^{9-12}	10^{9-12}	$2.0x10^{-4}$
Glass coefficient (DMA) [℃]		210	163	171
CTE	α1 [ppm]	44	36	40
	α2 [ppm]	80	83	86
Thermal conductivity [W/mK]		1.1	1.4	7.8
Peel strength	Non-desmear[N/cm]	-	4.5	5.0
	Desmear [N/cm]	7.1	7.8	-

Environmental test

	Long Life type AE1125DS		Standard type AE1125HD		High Thermal Conductivity type AE3030	
Test items (FR-4,1.6mmt,0.35mmφ)	De-lamination	Expansion	De-lamination	Expansion	De-lamination	Expansion
Solder dipping (288℃/5sec/5cycles)	Nothing	0	Nothing	0	Nothing	<5μm
Thermal cycling(-65℃/30min⇔125℃/30min/1000cycles)	Nothing	<4μm	Nothing	<4μm	Nothing	0
PCT (121℃/2atm/100%RH/336h)	Nothing	0	Nothing	0	Nothing	0

OS1304-1000

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