



TECHNICAL DATA SHEET

ELECTRA^ΩD'OR™

ED8080

CAPACITOR DIELECTRIC PASTES
FOR RIGID AND FLEXIBLE CIRCUITS

PRODUCT DESCRIPTION

ED8080 Capacitor Dielectrics are polymer based pastes formulated to give high dielectric constants for use in buried capacitor applications in multilayer circuits.

Materials are available for use on both rigid and flexible substrates.

PRODUCT RANGE

ED8080 Rigid Thermal cure single-pack **thermoset** capacitor dielectric for **rigid** substrates

ED8080 Flex Thermal cure single-pack **thermoplastic** capacitor dielectric for **flexible** substrates

PROCESSING

It is recommended to overprint two layers of dielectric for good insulation over irregular surfaces. Two layers of dielectric will reduce the risk of poor performance caused by printing pin-holes.

Parameter	ED8080 Rigid	ED8080 Flex
Screen Mesh	43 to 165T (typically 120T)	43 to 165T (typically 120T)
Drying/Curing	30 to 60 mins at 150°C	10 to 30 mins 80 to 100°C
Typical Substrates	Copper/FR4	Copper/Kapton ITO/Polyester
Plating	Copper, no pre-treatment required	N/a
Viscosity Reducer	ER7	ER17



PROPERTIES

Parameter	ED8080 Rigid	ED8080 Flexible
Viscosity	50 to 100 Poise	5 to 20 Poise
Solids level	86% w/w	66% w/w
Density (gcm ⁻³)	1.95	1.78
Adhesion	100%	100%
Hardness	5H	HB
Solvent resistance	PASS 60 seconds Methylene Chloride	PASS 60 seconds Industrial Methylated Spirit
Solder resistance	PASS 10 seconds at 260°C	N/a
Flexibility (Ø3mm mandrel)	N/a	Excellent – no cracking
Dielectric constant	50-53	12-15
Loss tangent	10 Hz 0.10 1 KHz 0.02 1 MHz 0.04	1 KHz 0.02

CLEANING:

All screens and utensils should be cleaned with the following:

ED8080 Rigid: Electra SW100 or Dowanol PMA

ED8080 Flex: Butyroalactone.

SHELF-LIFE

ED8080 Rigid: Minimum 3 months from date of manufacture when stored at room temperature.
Minimum 6 months from date of manufacture when stored under refrigeration.

ED8080 Flex: Minimum 6 months from date of manufacture when stored at room temperature.
Refrigeration not required.



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