DUPONT™ PYRALUX® CG

FLEXIBLE CIRCUIT MATERIALS

DESCRIPTION

DuPont™ Pyralux® CG flexible circuit material is an all-polyimide copper-clad laminate. This flexible circuit material meets commercial and industrial performance requirements for multilayer flex and rigid flex applications.

Offered in the standard 25 and 50 microns dielectric thicknesses, DuPont™ Pyralux® CG flexible circuit materials provide designers, fabricators, and assemblers a versatile option for a standard set of flexible circuit constructions.

- Full compatibility with PWB industry processes
- Certified to IPC 4204/11
- UL 94V-0, UL 746F, UL 160°C max. operating temperature
- RoHS compliant, halogen free and Pb-free alloy compatible

Table 1 - DuPont™ Pyralux® CG Product Offerings

Product Code*	Copper Thickness (µm)	Dielectric Thickness (µm)	Copper Thickness (µm)
CG182518E	18	25	18
CG352535E	35	25	35
CG185018E	18	50	18
CG355035E	35	50	35

The "E" at the end of the code specifies electro-deposited copper (e.g. CG352535E).

Table 2 - Pyralux® CG Properties vs IPC Specifications

Laminate Property	IPC TM-650 (* or other)	CG-352535 25 µm dielectric	CG-355035 50 µm dielectric
Adhesion to copper (Peel Strength) As fabricated, N/mm (lb/in) After solder, N/mm (lb/in)	Method 2.4.9	 1.0 (5.7) 1.0 (5.7)	 >1.0 (5.7) >1.0 (5.7)
Solder Float at 288°C (550°F)	Method 2.4.13	Pass	Pass
Dimensional Stability Method B, % Method C, %	Method 2.2.4	 -.024 to -.08 -.05 to -.10	 -.024 to -.08 -.04 to -.10
Dielectric Thickness Tolerance, %	Method 4.6.2	±10	±10
UL Flammability Rating	*UL-94	V-0	V-0
Dielectric Constant*, 1 MHz	Method 2.5.5.3	3.4	3.4
Dissipation Factor*, 1 MHz	Method 2.5.5.3	0.003	0.002
Dielectric Strength, kV/mil	Method 2.5.6.1	4-5	4-5
Solderability	*IPC-S-804, M. 1	Pass	Pass
In-Plane CTE (ppm/°C) T<Tg	—	25	25
Tg (°C)	DMA	220	220

DUPONT™ PYRALUX® CG

GENERAL INFORMATION

DuPont™ Pyralux® CG processing is not unlike processing conventional coverlay and bondply. It is recommended that the user consult the Pyralux® CG Processing Guide obtainable from your DuPont Technical Representative.

Quality and Traceability

DuPont™ Pyralux® CG flexible circuit material copper clads are manufactured under a quality system registered to ISO9002 by Underwriters Laboratories and certified to IPC-4204/11. Complete material and manufacturing records, which include archive samples of finished product, are maintained by DuPont. Each manufactured lot is identified for reference and traceability. The packaging label serves as the primary tracking mechanism in the event of customer inquiry and includes the product name, batch number, size, and quantity.

Storage Conditions and Warranty

DuPont™ Pyralux® CG flexible circuit material laminates should be stored in the original packaging at temperatures of 4-29°C (40-85°F) and below 70% humidity. The product should not be frozen and should be kept dry, clean and well protected. Subject to compliance with the foregoing handling and storage recommendations, the DuPont warranty, as provided in the DuPont Standard Conditions of Sale, shall remain in effect for a period of two years following the date of shipment.

Safe Handling

Anyone handling DuPont™ Pyralux® CG flexible circuit materials should wash their hands with soap before eating, smoking, or using restroom facilities. Although DuPont is not aware of anyone developing contact dermatitis when using DuPont™ Pyralux® CG products, some individuals may be more sensitive than others. Gloves, finger cots, and finger pads should be changed daily. DuPont™ Pyralux® CG flexible circuit materials are fully cured when delivered. However, lamination areas should be well ventilated with a fresh air supply to avoid build-up from trace quantities of residual solvent (typical of polyimides) that may volatilize during press lamination. When drilling or routing parts made with DuPont™ Pyralux® CG, provide adequate vacuum around the drill to minimize worker exposure to generated dust. As with all thin, copper-clad laminates, sharp edges present a potential hazard during handling. All personnel involved in handling Pyralux® CG clads should use suitable gloves to minimize potential cuts.

Packaging

DuPont™ Pyralux® CG flexible circuit materials copper clad laminate is supplied in the following standard sheet sizes:

- 24” x 18” (610 mm x 457 mm)
- 24” x 36” (610 mm x 914 mm)

All DuPont™ Pyralux® CG packaging materials are 100% recyclable

pyralux.dupont.com

K-28741 (2/15)