

DSM 3.0.6

Printed Circuit Board

General:

PCB A woven glass impregnated epoxy based thermoset, available as a single, double & multi-layered copper clad laminate.

The backbone of all major electronics, they route current through a network of etched copper laminate pathways directing electrical signals to the surface mounted components.

Specifications:**1. Base Laminate Type:**

Epoxy Glass to BS EN61249-2-7 (FR4 UL approved) for single and double-sided PCBs. Epoxy Glass to BS EN61249-2-7 (FR4 UL approved) for multilayer PCBs. Thickness: 1.6mm $\pm$ 0,2mm or 3.2mm $\pm$ 0,2mm where additional mechanical strength is required e.g. backplanes.

Finished copper thickness: 1oz (35 microns) generally, or 2oz for high current applications.

2. Surface Finish:

Electroless Nickel (Ni) thickness of 3-6 microns, with a flash of Gold (Au) 0.05 microns (min), as stated in IPC 4552 for Class 1, 2, and 3. ENIG (Electroless Ni, Immersion Gold).

As an alternative if the ENIG process is not available it is permissible to use :- Electroless Nickel (Ni) thickness of 3-6 microns, with a flash of Silver (Ag) 0.05 microns (min), as stated in IPC 4553 Thin Silver for Class 1, 2, and 3. or with a flash of Silver (Ag) 0.12 microns (min), as stated in IPC 4553 Thick Silver for Class 1, 2, and 3.

Note. Finishes will be specified in the board 'Requirement Specification'

3. Solder Resist Solder Resist: To IPC-SM-840, colour matt green.

4. Component Idents Defined: in DSEI-PCB.

5. Board Construction: No of Layers will be stated e.g. Double side plated through. Outside edge dimensions will be shown.

6. Mechanical Detail: Any special requirements to be shown on detail drawing.

These values are representative. For critical applications, refer to data-sheet.

MECHANICAL PROPERTIES					
	HARDNESS Shore A	TENSILE STRENGTH:	YOUNGS MODULUS:	POISSONS RATIO:	DENSITY:
FR4	---	310 MPa	22 GPa	0.13	1850 Kg/m³

Issue	01	02	03	04	05	06	07	08	09
DCR	7166	41713	44832						

