



# Q100C

(UL ANSI: FR-4.0) UV Blocking

## FEATURES

- Tg 135°C (DSC)
- UV Blocking/AOI Compatible

## APPLICATIONS

Computer, Instrumentation, VCR, Communication equipment, Consumption electronics, Game machine.

For applications with CAF requirements, recommend customer to carry a systematic assessment of its reliability.

## GENERAL PROPERTIES

| Test Items                | Test Method         | Test Condition    | Unit   | Typical Value       |
|---------------------------|---------------------|-------------------|--------|---------------------|
| Tg                        | IPC-TM-650 2.4.25D  | DSC               | °C     | 140                 |
| Td                        | IPC-TM-650 2.4.24.6 | TGA (5% W.L)      | °C     | 313                 |
| T260                      | IPC-TM-650 2.4.24.1 | TMA               | min    | 15                  |
| Thermal Stress            | IPC-TM-650 2.4.13.1 | 288°C, solder dip | s      | 60                  |
| CTE (Z-axis)              | IPC-TM-650 2.4.24   | Before Tg         | ppm/°C | 60                  |
|                           | IPC-TM-650 2.4.24   | After Tg          | ppm/°C | 280                 |
|                           | IPC-TM-650 2.4.24   | 50-260°C          | %      | 3.8                 |
| Permittivity (1MHz)       | IPC-TM-650 2.5.5.9  | C-24/23/50        | -      | 4.9                 |
| Loss Tangent (1MHz)       | IPC-TM-650 2.5.5.9  | C-24/23/50        | -      | 0.015               |
| Volume Resistivity        | IPC-TM-650 2.5.17.1 | C-96/35/90        | MΩ-cm  | 5.1×10 <sup>8</sup> |
|                           |                     | E-24/125          |        | 5.3×10 <sup>6</sup> |
| Surface Resistivity       | IPC-TM-650 2.5.17.1 | C-96/35/90        | MΩ     | 5.5×10 <sup>7</sup> |
|                           |                     | E-24/125          |        | 5.7×10 <sup>6</sup> |
| Arc Resistance            | IPC-TM-650 2.5.1    | D-48/50+D-0.5/23  | s      | 120                 |
| Dielectric Breakdown      | IPC-TM-650 2.5.6    | D-48/50+D-0.5/23  | kV     | >45                 |
| Peel Strength (1oz)       | IPC-TM-650 2.4.8    | 288°C/10s         | N/mm   | 1.7                 |
| Flexural Strength (LW/CW) | IPC-TM-650 2.4.4    | A                 | MPa    | 550/450             |
| Water Absorption          | IPC-TM-650 2.6.2.1  | D-24/23           | %      | 0.10                |
| Flammability              | UL94                | C-48/23/50        | Rating | V-0                 |
| CTI                       | IEC 60112           | A                 | Rating | PLC3                |

- Remarks:
1. Specification sheet: IPC-4101/97, is for your reference only.
  2. All the typical value is based on the 1.6mm (8\*7628) specimen.
  3. All the typical value listed above is for your reference only, please turn to Shengyi Technology Co., Ltd for detailed information, and all rights from this data sheet are reserved by Shengyi Technology Co., Ltd



# Q100CB PREPREG

(UL ANSI: FR-4.0) Bonding Prepreg For Q100C

## PREPREG PARAMETERS

| Glass fabric type | Resin content (%) | Cured thickness (mm) | Standard size (Roll type) |
|-------------------|-------------------|----------------------|---------------------------|
| 1080              | 63                | 0.073                | 1.260m×300m               |
|                   | 65                | 0.078                |                           |
|                   | 68                | 0.086                |                           |
| 2313/3313         | 55                | 0.098                | 1.260m×250m               |
|                   | 58                | 0.106                |                           |
| 2116              | 52                | 0.115                | 1.260m×150m               |
|                   | 54                | 0.121                |                           |
|                   | 57                | 0.132                |                           |
| 1506              | 45                | 0.154                | 1.260m×150m               |
|                   | 48                | 0.165                |                           |
| 7628              | 45                | 0.196                | 1.260m×150m               |
|                   | 47                | 0.205                |                           |
|                   | 50                | 0.221                |                           |

Other type, resin content and size could be available upon request.

## HOT PRESSING CYCLE

- The heat-up rate depends on the inner copper or the structure of multilayer PCB.
- Curing time: >40min (175°C).
- If you need any more detail information, please turn to Shengyi Technology Co., Ltd.

## STORAGE CONDITION

- 3 months when stored at < 23°C and <50% RH.
- 6 months when stored at <5°C. Normalize in room temperature for at least 4h before using.
- Beware of moisture, always keep wrapped in damp-proof material. Keeping in normal condition, prepreg might absorb moisture and its bonding strength would be weakened.
- Avoid UV-rays and strong light.

## PURCHASING INFORMATION

| Thickness       | Copper foil    | Standard size                                   |
|-----------------|----------------|---|
| 0.50mm to 3.2mm | 12um to 105 um | 1,020mm×1,220mm(40"×48") 915mm×1,220mm(36"×48") |
|                 |                | 1,070mm×1,220mm(42"×48")                        |

Remarks: Other sheet size and thickness could be available upon request.