



SCR20S

Copper Base Laminate

FEATURES

- Thermal Conductivity 2.1 W/(m·K)
- High Peel Strength
- Excellent Thermal Reliability and Insulation

APPLICATIONS

- Hi-power LED Lighting
- Power Supply Board
- Automobile Lighting

GENERAL PROPERTIES

| Test Items | Test Method | Test Condition | Unit | Typical Value |
|----------------------|---------------------|-----------------------|----------------------|-----------------|
| Thermal Conductivity | ASTM-D5470 | Dielectric layer | W/(m·K) | 2.1 |
| Thermal Resistance | ASTM-D5470 | Dielectric layer | K·cm ² /W | 0.52 |
| T _g | IPC-TM-650 2.4.25D | DSC | °C | 160 |
| T _d | IPC-TM-650 2.4.24.6 | 5% Wt. loss | °C | 395 |
| Thermal Stress | IPC-TM-650 2.4.13.1 | 288°C, solder float | min | 30 |
| CTE(Z-axis) | IPC-TM-650 2.4.24 | Before T _g | ppm/°C | 17 |
| | IPC-TM-650 2.4.24 | After T _g | ppm/°C | 39 |
| | IPC-TM-650 2.4.24 | 50-260°C | % | 0.69 |
| Volume Resistivity | IPC-TM-650 2.5.17.1 | C-96/35/90 | MΩ·cm | 10 ⁸ |
| Surface Resistivity | IPC-TM-650 2.5.17.1 | C-96/35/90 | MΩ | 10 ⁸ |
| Dielectric Breakdown | IPC-TM-650 2.5.6 | D-48/50+D-0.5/23 | kV | 5.0 |
| Hi-pot Test | GB/T 31988 | DC | V | 4000 |
| | | AC | V | 3000 |
| Peel Strength(1oz) | IPC-TM-650 2.4.8 | 288°C/10s | N/mm | 1.3 |
| Flammability | UL94 | C-48/23/50 | Rating | V-0 |
| MOT | UL | A | °C | 130 |
| CTI | IEC60112 | A | Rating | PLC 0 |

Remarks: Typical value is based on specimen of 1.5mm Cu/100μm dielectric/1oz Cu.

All the typical values listed above are for your reference only and not intended for specification. Please contact Shengyi Technology Co., Ltd. for detailed information. All rights from this data sheet are reserved by Shengyi Technology Co., Ltd.

Explanation: C=Humidity conditioning, D=Immersion conditioning in distilled water, E=Temperature conditioning

The first digit following the letter indicates the duration of preconditioning in hours, the second digit the preconditioning temperature in °C and the third digit the relative humidity.

PURCHASING INFORMATION

| | Material | Thickness |
|-------------------------|---|--|
| Cu | E/D Cu | Hoz ~ 4oz |
| Dielectric Layer | Epoxy resin filled with inorganic filler | 50~150μm |
| Base Metal Plate | C1100 Cu | 0.8mm, 1.0mm, 1.2mm, 1.5mm, 1.8mm, 2.0mm, 3.0mm |
| Protective Film | PET | 60μm |
| Standard Size | 500mm X 600mm (Other sizes are available upon request) | |