



SAR15

Aluminium Base Laminate

FEATURES

- High CTI
- Halogen free
- Superior heat dissipation
- Excellent mechanical process ability
- Excellent thermal and insulation reliability

APPLICATIONS

- LED TV
- Power Supply Board
- Mid-power LED lighting

GENERAL PROPERTIES

| Test Items | Test Method | Test Condition | Unit | Typical Value |
|----------------------|---------------------|------------------|----------------------|-----------------|
| Thermal Conductivity | ASTM-D5470 | Dielectric layer | W/(m·K) | 1.5 |
| Thermal Resistance | ASTM-D5470 | Dielectric layer | K·cm ² /W | 0.70 |
| Tg | IPC-TM-650 2.4.25D | DSC | °C | 140 |
| Td | IPC-TM-650 2.4.24.6 | TGA (5% W.L) | °C | 380 |
| Thermal Stress | IPC-TM-650 2.4.13.1 | 288°C, float | min | 30 |
| CTE (Z-axis) | IPC-TM-650 2.4.24 | Before Tg | ppm/°C | 27 |
| | IPC-TM-650 2.4.24 | After Tg | ppm/°C | 30 |
| | IPC-TM-650 2.4.24 | 50-260°C | % | 0.75 |
| 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 | 6.0 |
| 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 [lb/in] | 1.3 [7.43] |
| Flammability | UL94 | C-48/23/50 | Rating | V-0 |
| MOT | UL | A | °C | 130 |
| CTI | IEC60112 | A | Rating | PLC 0 |

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

2. 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.

PURCHASING INFORMATION

| | Material | Thickness |
|------------------|--|-----------|
| Cu | E/D Cu | Hoz-4oz |
| Dielectric Layer | Epoxy resin filled with inorganic filler | 50-150um |
| Aluminum Plate | 5052 Al | 0.3-3.0mm |
| Protective Film | PET | |
| Standard Size | 1040mm × 1240, 510mm × 610mm | |

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