



# SAR20H

## Aluminium Base Laminate

### FEATURES

- Halogen free and High CTI
- Thermal Conductivity 2.1 W/(m·K)
- Excellent thermal resistance and insulation reliability
- Excellent processability

### APPLICATIONS

- Hi-power LED lighting
- LED TV
- Power supply board

### 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 <sup>2</sup> /W	0.52
Tg	IPC-TM-650 2.4.25D	DSC	°C	160
Td	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 Tg	ppm/°C	17
	IPC-TM-650 2.4.24	After Tg	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 <sup>8</sup>
Surface Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ	10 <sup>8</sup>
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 Al/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
Aluminium Plate	5052 Al	0.3-3.0mm
Protective Film	PET	60µm
Standard Size	1040mm × 1240, 510mm × 610mm (Other sizes are available upon request)	