



SAR20H

Aluminium Base Laminate

FEATURES

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

APPLICATIONS

On-board Charger, EPS, Automobile
Lighting, AC-Inverter, DC-DC Converter
Power Supply Board
Hi-power LED 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
Tg	IPC-TM-650 2.4.25D	DSC	°C	160
Td	IPC-TM-650 2.4.24.6	TGA (5% W.L)	°C	395
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	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 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 [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
Aluminium 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.