



SCGA-500 GF300

PTFE with Glass Reinforced RF Circuit Material

FEATURES

- Consistent and Stable Dk/Df over Frequency and Temperature.
- Low Dielectric Loss Tangent.
- Low Moisture Absorption.
- Excellent Price Performance Value.

APPLICATIONS

Base Station Antennas
 Satellite Communications
 Antenna Feed Networks
 DAS & CPE Antenna
 RF Passive Components

GENERAL PROPERTIES

Test Items	Test Method	Test Condition	Unit	Typical Value
Dielectric Constant, Process Dk	IPC-TM-650 2.5.5.5	10GHz/23 °C	-	3.00±0.04
Loss Tangent	IPC-TM-650 2.5.5.5	10GHz/23 °C	-	0.0023
TcDk	IEC 61189-2-721	10GHz (-40-150 °C)	ppm/°C	-25
CTE (X/Y/Z-axis)	IPC-TM-650 2.4.24	TMA (30-260 °C)	ppm/°C	6.2/8.6/95
Volume Resistivity	IPC-TM-650 2.5.17.1	A	MΩ-cm	1.3X10 ⁸
Surface Resistivity	IPC-TM-650 2.5.17.1	A	MΩ	1.4X10 ⁸
Peel Strength	IPC-TM-650 2.4.8	288 °C/10s	N/mm [lb/in]	1.2 [6.86]
Water Absorption	IPC-TM-650 2.6.2.1	D-24/23	%	0.01
Thermal Conductivity	ASTM C518	100 °C	W/(m·K)	0.28
Tensile Modulus(LW/CW)	IPC-TM-650 2.4.4	A	GPa	7.9/8.8
Tensile Strength (LW/CW)	IPC-TM-650 2.4.4	A	MPa	254/279
Density	ASTM D792	-	g/cm ³	2.27
Flammability	UL-94	C-48/23/50	Rating	V-0

Notes: All the typical value is based on the 0.76mm (0.030") specimen.

PRODUCT SPECIFICATION PROPEAIES

Standard Thickness Offerings	Standard Panel Sizes	Standard Copper Cladding
0.010" (0.25mm) 0.020"(0.51mm) 0.030" (0.76mm) 0.040"(1.02mm) 0.050" (1.27mm) 0.060"(1.52mm)	36" x 48" & 40"x48" Additional sizes may be available upon request	HOz, 1Oz HTE & RTF

Remark: 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.