



I used Panlite LN-1250G (Polycarbonate High Heat) from Teijin Chemicals Ltd. for several products, thus I had LN-1250G sample cards. Those sample cards were used in dielectric constant measurement experiment, the details are illustrated in Part III and Part IV. LN-1250G electrical properties are shown in the following form [4].

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Relative permittivity (100Hz)	3.1	-	IEC 60250
Relative permittivity (1MHz)	3	-	IEC 60250
Dissipation factor (100Hz)	10	E-4	IEC 60250
Dissipation factor (1MHz)	90	E-4	IEC 60250
Volume resistivity	>1E13	Ohm*m	IEC 60093
Surface resistivity	>1E15	Ohm	IEC 60093
Electric strength	30	kV/mm	IEC 60243-1
Comparative tracking index	275	-	IEC 60112

LN-1250G Sample Card:

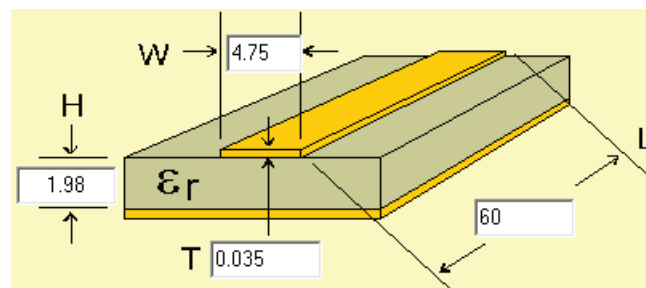


Bottom View

Top View

### Part III: Making Microstrip from Scratch

The microstrip circuit board was made by using Panlite LN-1250G as “laminare material” and Copper Foil Tape as Conductor and Ground. The microstrip design is shown in the following diagram.



Microstrip Design (Length Units: mm)