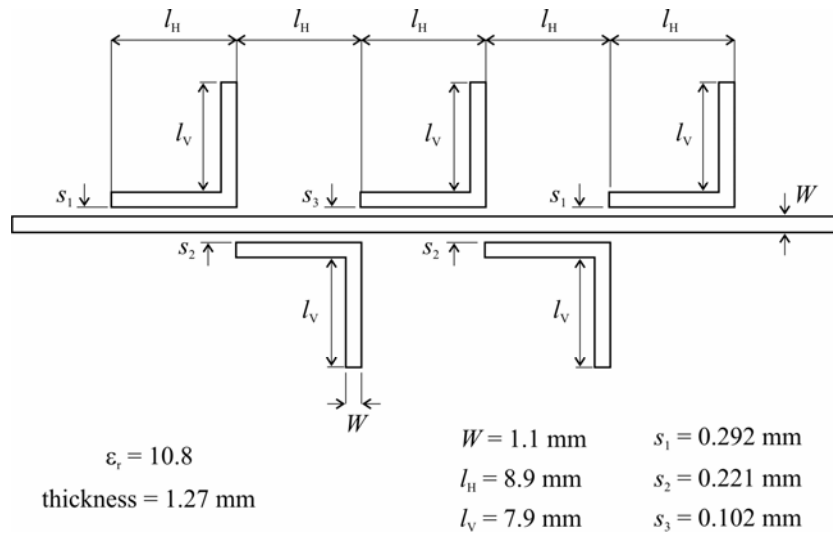


## AW Modeling

Modeling technique in AW Modeler can be illustrated by creating a microstrip narrow-band band stop filter with L-resonators. Modeling is performed easily by using advantages and built-in tools of AW Modeler. Layout of the filter is shown bellow.



Filter is modeled using non-uniform grids. In order to obtain maximum flexibility, WIPL-D symbolic mechanism is used and structure can be modified very quickly by a simple change of symbol values. Symbols are entered in a straightforward manner, by using the editor shown below.

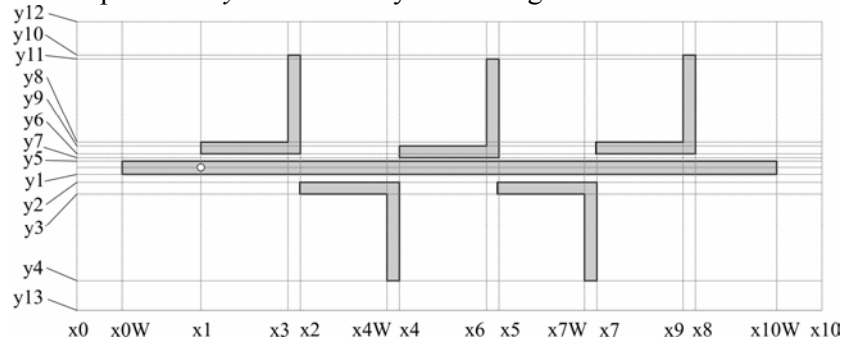
	Name	Expression	Value
1	h	1.27	1.2700000000000000E+0000
2	w	1.1	1.1000000000000000E+0000
3	Lh	8.9	8.9000000000000000E+0000
4	Lv	7.9	7.9000000000000000E+0000
5	s1	0.292	2.9200000000000000E-0001
6	s2	0.221	2.2100000000000000E-0001

Name: h

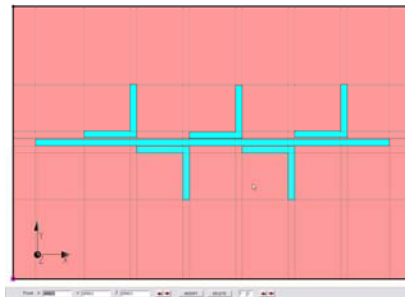
Expression: 1.27

Value: 1.2700000000000000E+0000

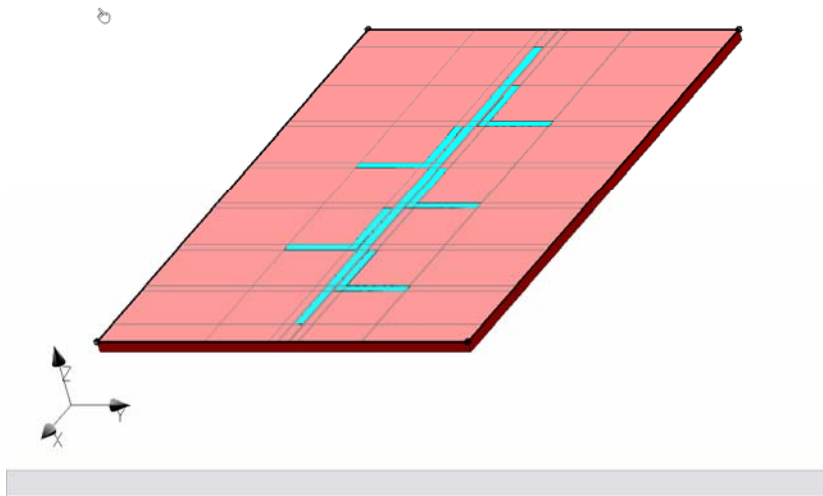
Coordinates are adopted in  $xOy$  coordinate system . Origin is marked with white circle.



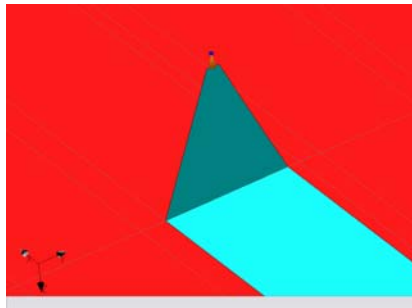
The printed circuit is created using polygons as metal L resonators and after that the substrate is created using just one polygon.



Dielectric polygons which model lateral sides of substrate can be created by enclosing top dielectric polygon.



The feeders can be created automatically using predefined entities.



Analysis Settings are defined in the appropriate menu.



Meshing obtained using Add Points Along Edges feature with Maximal Normalized Edge Length set to 1.5 and Meshing obtained using Meshing>Along Grid Lines feature are presented bellow.

