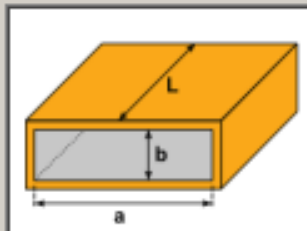
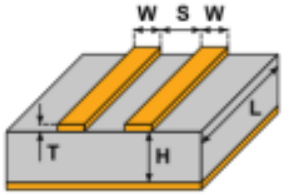
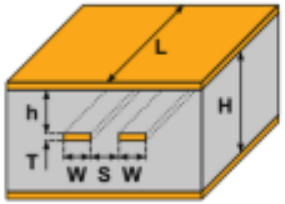
QucsStudio Transmission Line Calculator 4.3.1

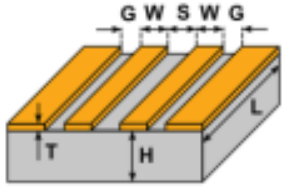
File Help

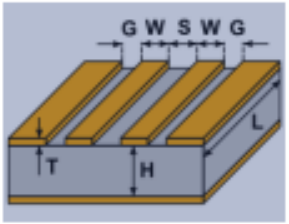
Choice

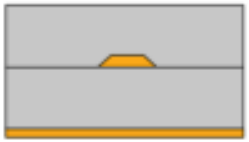




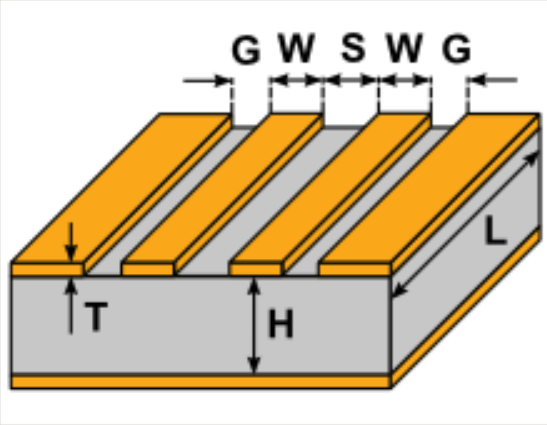








Coupled Coplanar Waveguide with Backside



Properties

ε_r	4.5	
tan δ	2e-2	
Resistivity	1.72e-8	
Conductor μ_r	0.999994	
Roughness	0.1	µm
T	1.38	mil
H	50	mil

Parameters

Frequency: 1 GHz

Dimensions

W	14.5	mil	change
G	8	mil	fix
S	10	mil	
L	600	mil	

RF Properties

Z_even = 2*Z_common	100.377	ohms
Z_odd = Z_diff / 2	52.7618	ohms
Angle even	29.8947	degree
Angle odd	29.4847	degree

Results

Skin Depth:	0.0821773 mil
$\varepsilon_{r,eff,even}$:	2.66842
$\varepsilon_{r,eff,odd}$:	2.59574
Conductor Losses even:	0.0183199 dB
Conductor Losses odd:	0.0227845 dB
Dielectric Losses even:	0.0376838 dB
Dielectric Losses odd:	0.0365865 dB

Copy Component to Clipboard

Copy to Clipboard inclusive Circuit