

# Coplanar Waveguide

cpw

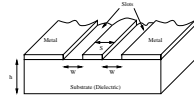


Figure 1: cpw — Coplanar Waveguide Element.

*Form:*

`cpw:<instance name>  $n_1$   $n_2$   $n_3$   $n_4$  <parameter list>`

$n_1$ ,  $n_2$ ,  $n_3$  and  $n_4$  are the element nodes.

*Parameters:*

Parameter	Type	Default value	Required?
w: Strip to ground space(m)	DOUBLE	n/a	yes
s: Strip width(m)	DOUBLE	n/a	yes
length: Physical length(m)	DOUBLE	n/a	yes
er: Substrate dielectric constant	DOUBLE	1	no
t: Substrate thickness(m)	DOUBLE	n/a	yes
tand: Loss tangent	DOUBLE	0	no
sigma: Metal conductivity(S/m)	DOUBLE	5.8e+07	no
nsect: Enable discrete approximation with n sections	INTEGER	0	no
fopt: Optimum frequency for discrete approximation	DOUBLE	0	no

*Example:*

```
.model fsa1 cpw s=0.369m w=1m t=10u er=10.8 tand=0.001
cpw:t1 11 100 1 0 model="fsa1" length=8.5m
```

*Notes:*

There is no equivalent SPICE element.

*Version:*

2000.09.01

*Credits:*

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