

4 terminal physical transmission line

tlinp4

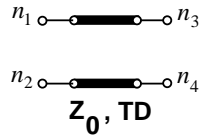


Figure 1: tlinp4 — Transmission line element.

Form: `tlinp4:<instance name> n1 n2 n3 n4 <parameter list>`

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

Parameters:

Parameter	Type	Default value	Required?
k: Effective dielectric constant	DOUBLE	1	no
alpha: Attenuation (dB/m)	DOUBLE	0.1	no
z0mag: Magnitude of characteristic impedance (ohms)	DOUBLE	n/a	yes
fscale: Scaling frequency for attenuation (Hz)	DOUBLE	0	no
tand: Loss tangent	DOUBLE	0	no
length: Line length (m)	DOUBLE	n/a	yes
nsect: Enable discrete approximation with n sections	INTEGER	0	no
fopt: Optimum frequency for discrete approximation	DOUBLE	0	no

Example:

```
.model c_line tlinp4 z0mag=75.00 k=7 fscale=10.e9 alpha = 59.9 nsect = 20 fopt=10e9
tlinp4: t2 2 0 3 0 model = "c_line" length=931.69u
```


Notes:

This is the T element in the SPICE compatible netlist.

Version:

2000.09.01

Credits:

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