

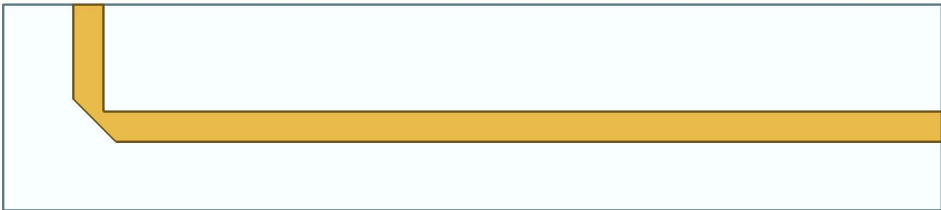
Microstrip Line

TL-D

1–110 GHz | 50 Ω reference | Single bend

Thin-film microstrip on alumina, with a top Au signal trace and a continuous backside Au ground plane, for RF interconnect.

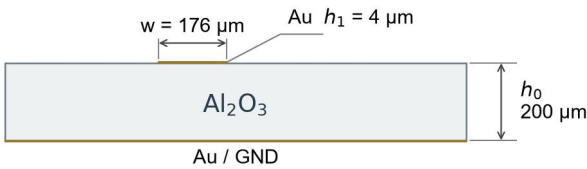
LAYOUT & DIMENSIONS



Substrate (L × W) 5.5 × 1.2 mm Line width w 176 μm

MATERIALS & SIMULATION CONDITIONS

Parameter	Value	Units
Substrate	Al ₂ O ₃	—
Substrate thickness h ₀	200	μm
Relative permittivity	9.8	—
Dielectric loss tangent	0.0003	—
Top / back metal	Au / Au	—
Metal thickness h ₁	4	μm
Reference impedance	50	Ω



S11 ELECTRICAL CHARACTERISTICS (HFSS)

Frequency (GHz)	1–10	10–40	40–67	67–110	1–110
S11, max. (dB)	-19.28	-21.67	-28.20	-22.22	-19.28
Frequency at max. (GHz)	5.088	15.170	52.775	105.640	5.088

S11 FREQUENCY RESPONSE

