

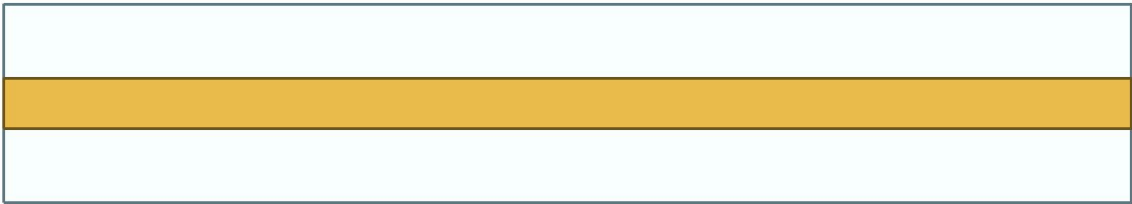
Microstrip Line

TL-A

1–110 GHz | 50 Ω reference | Straight

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

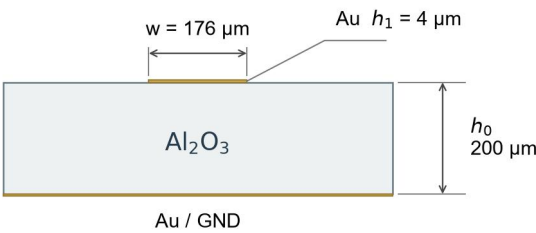
LAYOUT & DIMENSIONS



Substrate (L × W) 4 × 0.7 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)	-16.55	-19.06	-29.34	-30.57	-16.55
Frequency at max. (GHz)	6.178	19.258	46.235	110.000	6.178

S11 FREQUENCY RESPONSE

