

Model THC90110U

Features

Excellent phase& amplitude balance
Low Insertion Loss& VSWR
High Isolation

Technical Data Sheet			
Frequency Range	9~11GHz	Finish	Painted Blue_ RAL #5007
Nominal Split	6.02dB	Connector Body	Passivated Stainless Steel
Insertion Loss	≤1.8dB	Housing	Aluminum, 6061 T6
Isolation	≥20dB		Clear Chem Conversion Film
Amplitude Balance	≤±0.6dB	Connector Pin	Beryllium Copper, Gold Plate
Phase Balance	≤±8°	Solder	Lead Free, RoHS Compliant
VSWR	≤1.50:1	Operating Temperature	-55~+85°C
¹ Power Handling	Average ≤10Watt Peak ≤0.1KW	Operating Humidity	Up to 95%,Non- Condensing
Impedance	50Ω	Weight	180g
Port Connectors	SMA-Female		

¹Power Handling guaranteed when load's VSWR within 1.50:1.

Phase Relationship

A to ELΔ	A to AZΣ	A to ΔQ	A to AZΔ
0°	90°	180°	270°
D to ELΔ	D to AZΣ	D to ΔQ	D to AZΔ
0°	-90°	-180°	-270°

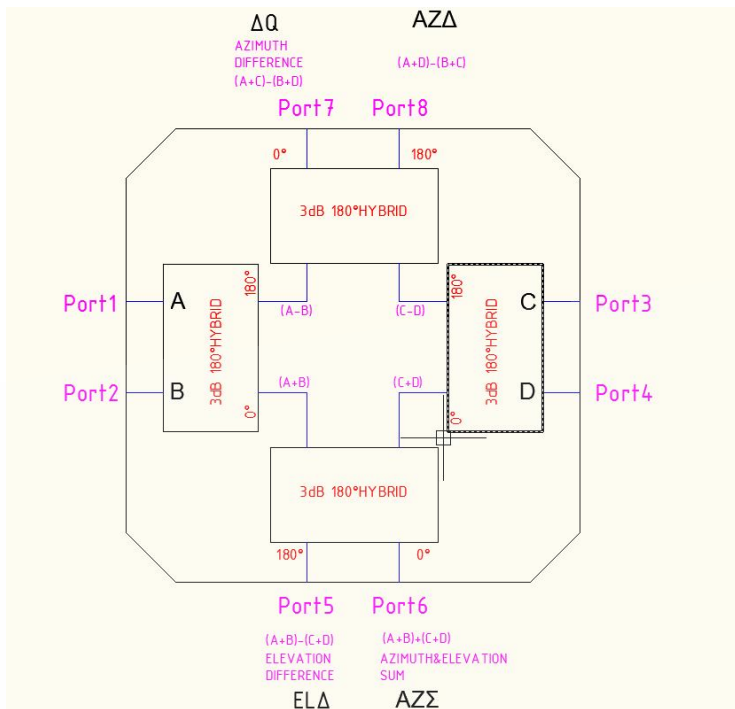
Environmental Parameters

Operating Temperature -55~+85°C

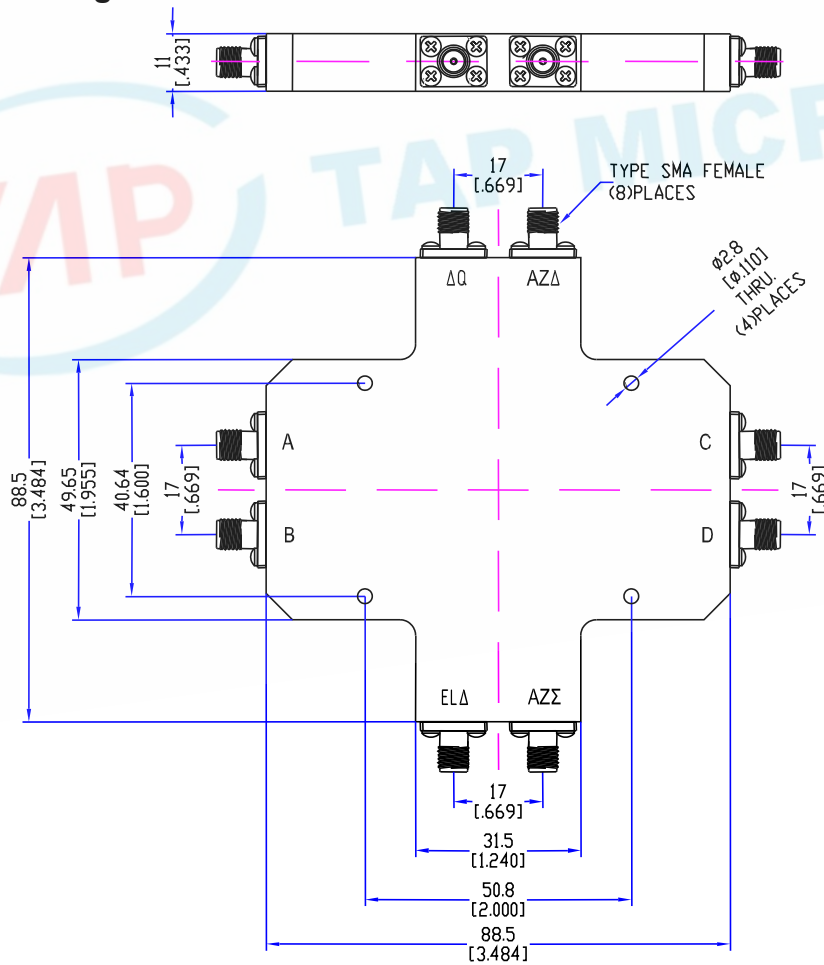
Operating Humidity Up to 90%,Non- Condensing



Schematic



Outline Drawing

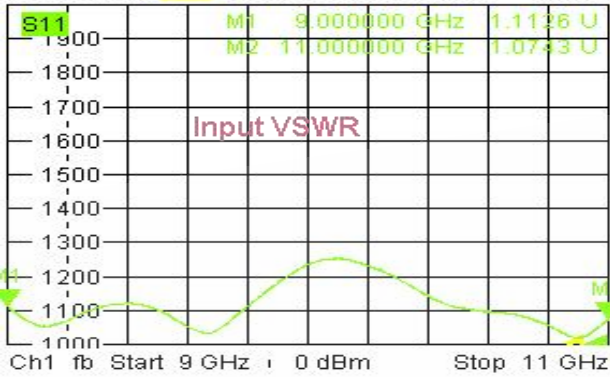


Typical Performance

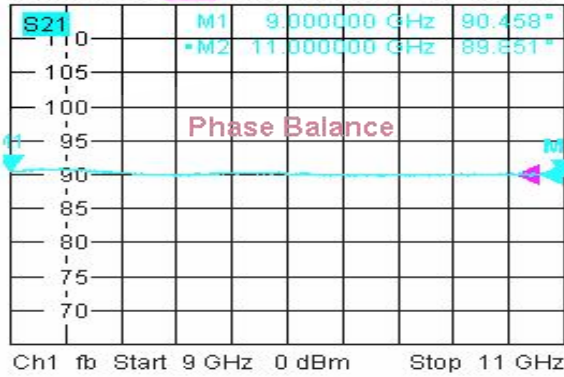
1. Insertion Loss, Amplitude & Phase Balance, VSWR



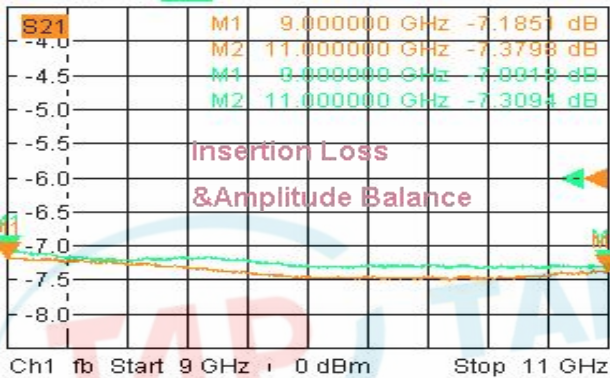
Trc1 **S11** SWR 100 mU/ Ref 1 U Cal
 Mem5[Trc1] **S11** SWR 100 mU/ Ref 1 U Invisib



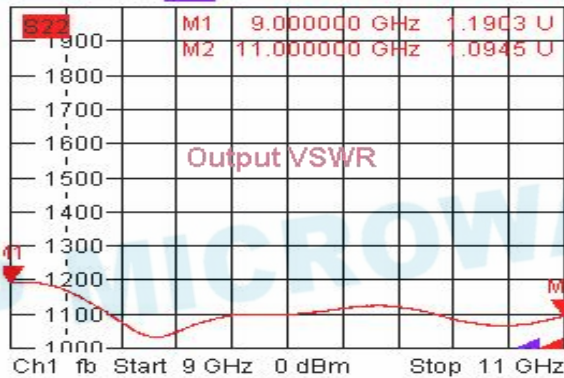
Trc2 **S21** Phase unwrap 5° / Ref 90°
 Mem6[Trc2] **S21** Phase unwrap 5° / Ref 90°



Trc3 **S21** dB Mag 0.5 dB / Ref -6 dB Cal
 Mem7[Trc3] **S21** dB Mag 0.5 dB / Ref -6 dB



Trc4 **S22** SWR 100 mU/ Ref 1 U Ca
 Mem8[Trc4] **S22** SWR 100 mU/ Ref 1 U Inv



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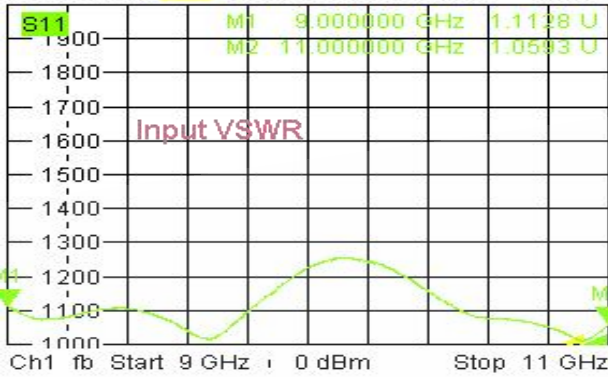


Typical Performance

2. Insertion Loss, Amplitude & Phase Balance, VSWR



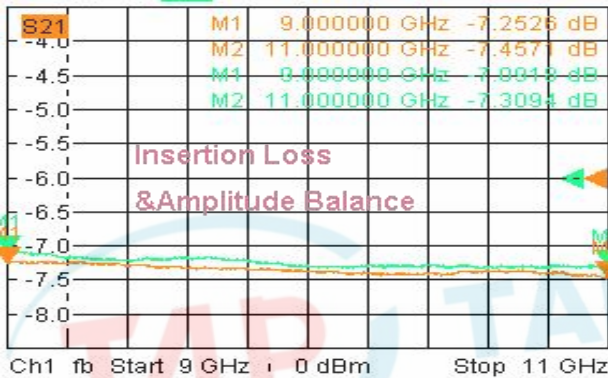
Trc1 Mem5[Trc1] S11 SWR 100 mU/ Ref 1 U Cal Invisib



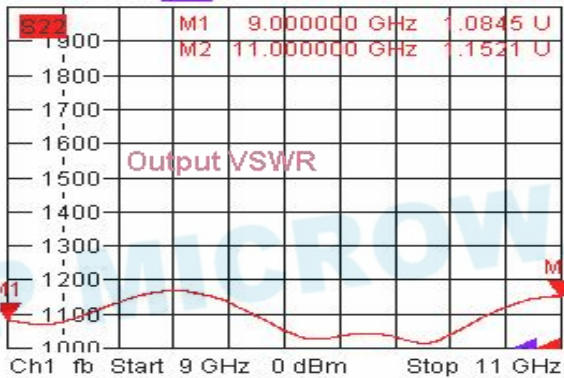
Trc2 Mem6[Trc2] S21 Phase unwrap 5° / Ref -90°



Trc3 Mem7[Trc3] S21 dB Mag 0.5 dB / Ref -6 dB Cal



Trc4 Mem8[Trc4] S22 SWR 100 mU/ Ref 1 U Cal



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Typical Performance

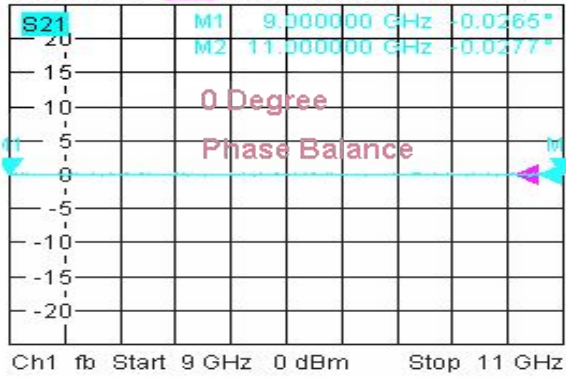
3. Insertion Loss, Amplitude & Phase Balance, VSWR_ 0°



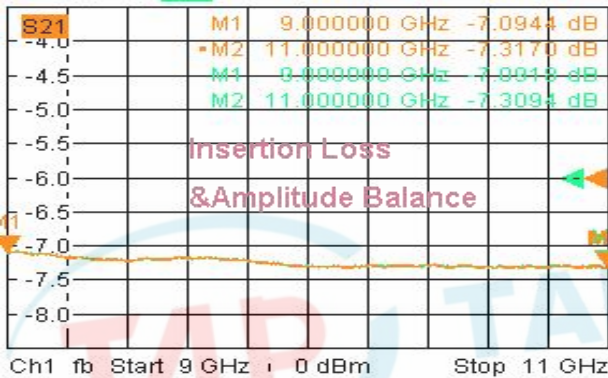
Trc1 **S11** SWR 100 mU/ Ref 1 U Cal
 Mem5[Trc1] **S11** SWR 100 mU/ Ref 1 U Invisib



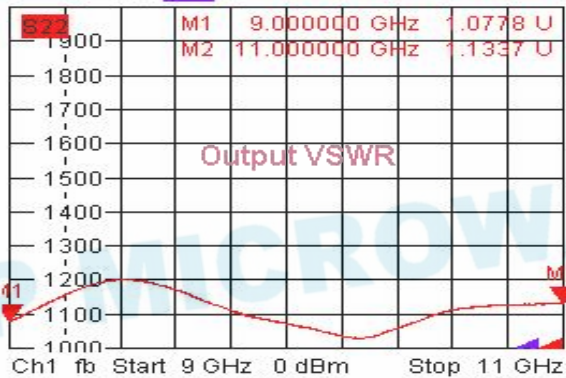
Trc2 **S21** Phase unwrap 5° / Ref 0°
 Mem6[Trc2] **S21** Phase unwrap 5° / Ref 0°



Trc3 **S21** dB Mag 0.5 dB / Ref -6 dB Cal
 Mem7[Trc3] **S21** dB Mag 0.5 dB / Ref -6 dB



Trc4 **S22** SWR 100 mU/ Ref 1 U Ca
 Mem8[Trc4] **S22** SWR 100 mU/ Ref 1 U Inv



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Typical Performance

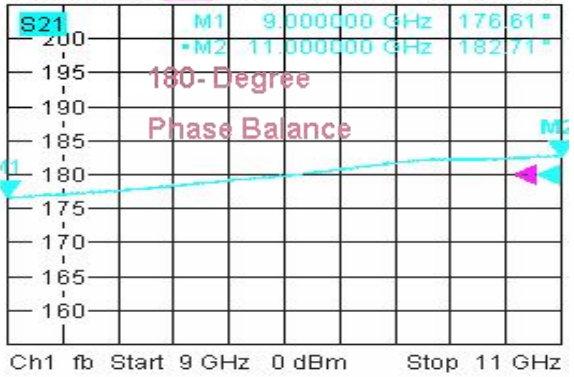
4. Insertion Loss, Amplitude & Phase Balance, VSWR _ 180°



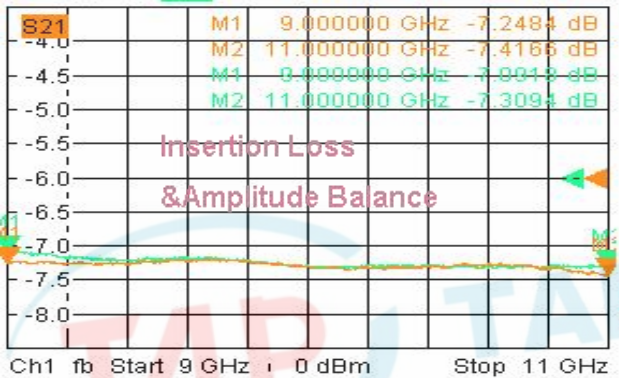
Trc1 Mem5[Trc1] S11 SWR 100 mU/ Ref 1 U Cal
S11 SWR 100 mU/ Ref 1 U Invisib



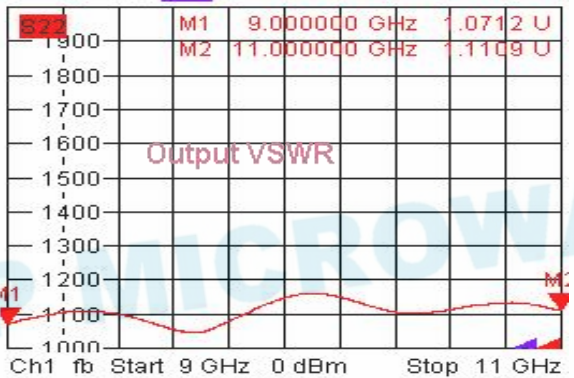
Trc2 Mem6[Trc2] S21 Phase unwrap 5° / Ref 180°
S21 Phase unwrap 5° / Ref 180°



Trc3 Mem7[Trc3] S21 dB Mag 0.5 dB / Ref -6 dB Cal
S21 dB Mag 0.5 dB / Ref -6 dB



Trc4 Mem8[Trc4] S22 SWR 100 mU/ Ref 1 U Ca
S22 SWR 100 mU/ Ref 1 U Im

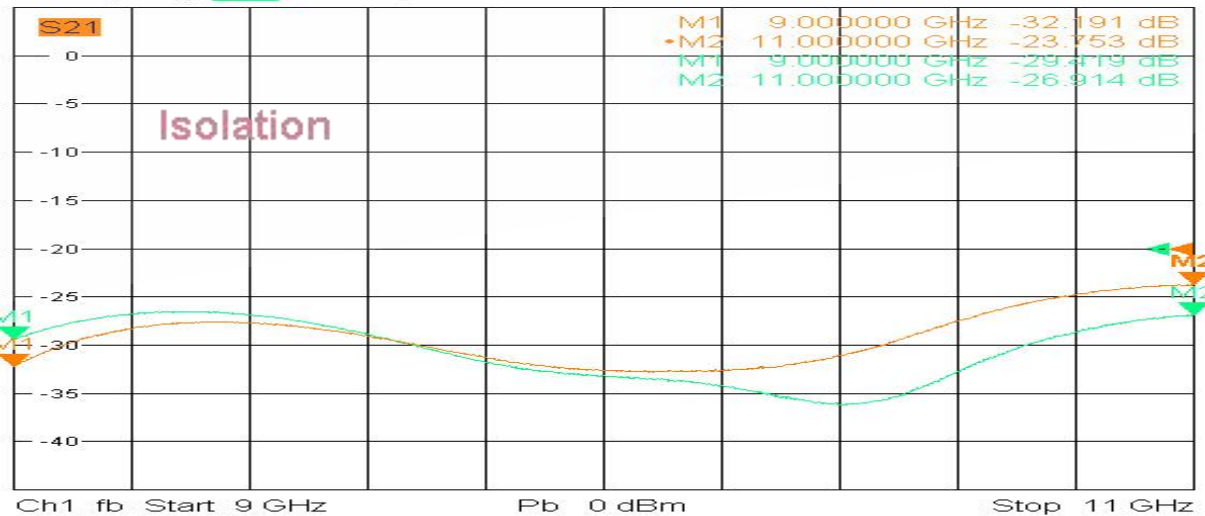


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5. Isolation



Trc3 Mem7[Trc3] S21 dB Mag 5 dB / Ref -20 dB Cal 3 (Max)
S21 dB Mag 5 dB / Ref -20 dB



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