

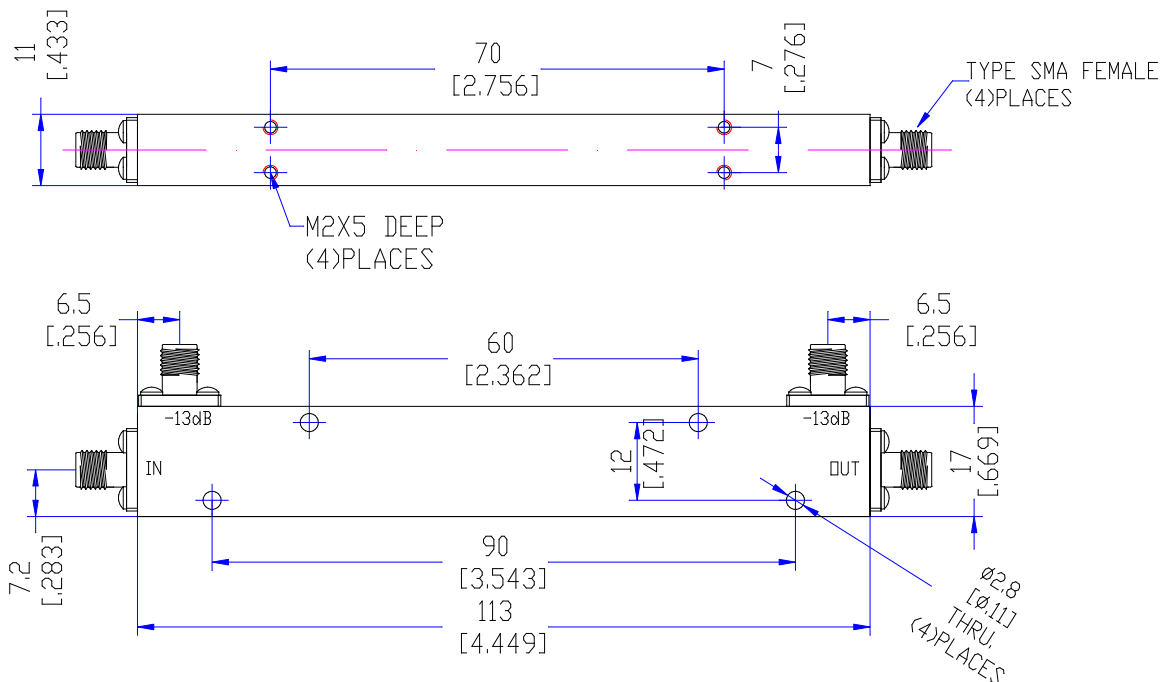
## Model TDC05180A13B

### Features

Low VSWR  
High Directivity  
Broadband & Miniature Size

Technical Data Sheet			
Frequency Range	0.5~18GHz	Finish	Painted Blue_ RAL #5007
Insertion Loss	≤1.2dB (Excl. Coupling Loss 0.23dB)	Connector Body	Passivated Stainless Steel
Coupling Factor	≤13±1.0dB	Housing	Aluminum, 6061 T6 Clear Chem Conversion Film
Coupling Sensitivity	≤±1.5dB	Connector Pin	Beryllium Copper, Gold Plate
Directivity	≥12dB	Solder	Lead Free, RoHS Compliant
VSWR	Primary ≤1.40:1 Secondary ≤1.40:1	Operating Temperature	-55~+85°C
<sup>1</sup> Power Handling	Incident ≤10Watt; Reflected ≤10Watt	Operating Humidity	Up to 95%, Non- Condensing
Impedance	50Ω	Weight	70g
Port Connectors	SMA-Female		

<sup>1</sup>Power Handling guaranteed when load's VSWR within 1.50:1.

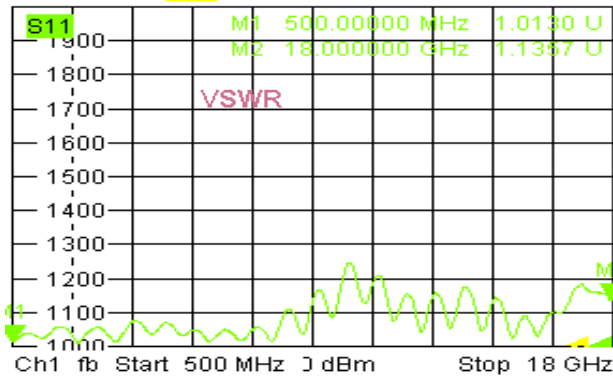


## Typical Performance

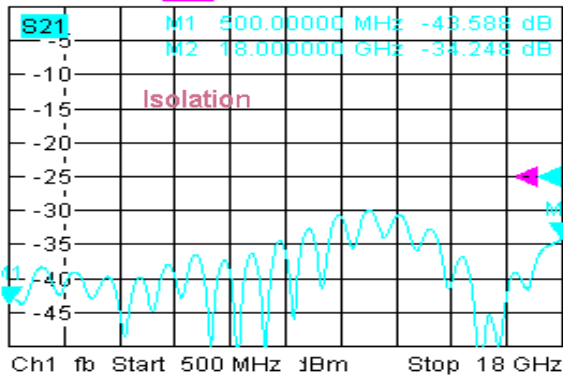
### 1. Coupling Factor & Sensitivity, Isolation, VSWR



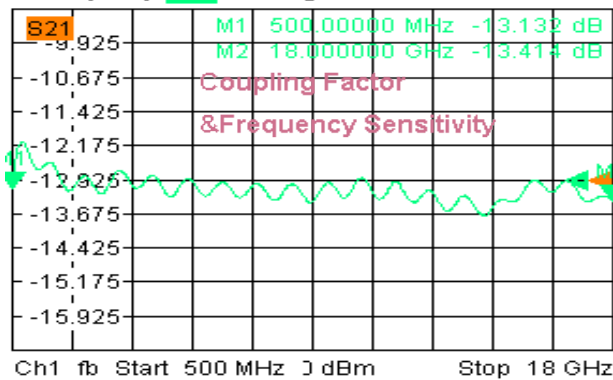
Trc1 Mem5[Trc1] **S11** SWR 100 mU/ Ref 1 U Cal  
**S11** SWR 100 mU/ Ref 1 U Invisib



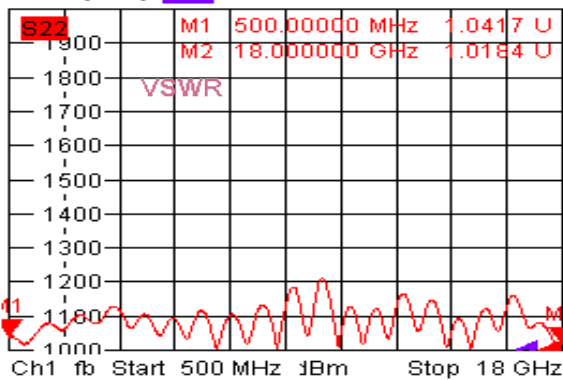
Trc2 Mem6[Trc2] **S21** dB Mag 5 dB / Ref -25 dB  
**S21** dB Mag 5 dB / Ref -25 dB



Trc3 Mem7[Trc3] **S21** dB Mag 0.75 dB / Ref -12.925 dB  
**S21** dB Mag 0.75 dB / Ref -12.925 dB



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



3/14/2020, 4:31 AM

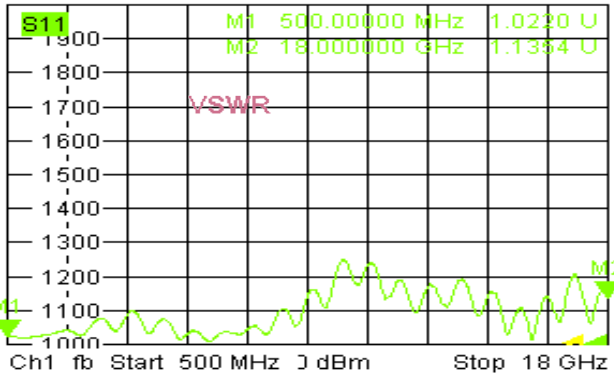


## Typical Performance

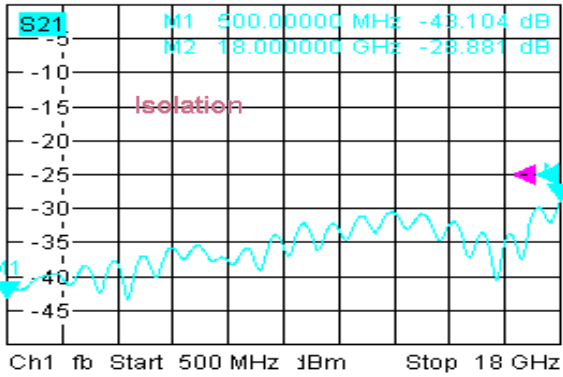
### 2. Coupling Factor & Sensitivity, Isolation, VSWR



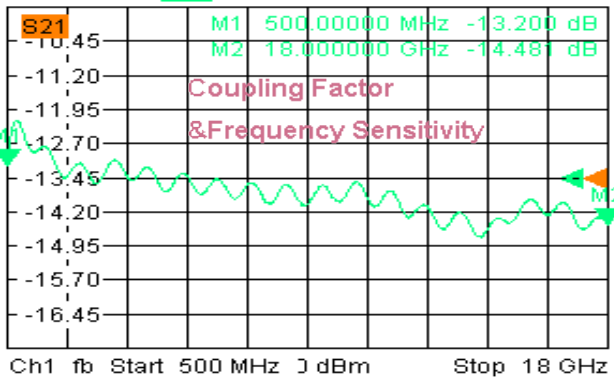
Trc1 Mem5[Trc1] S11 SWR 100 mU/ Ref 1 U Cal Invisib



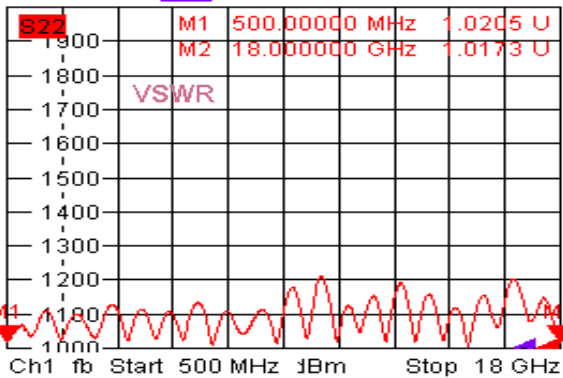
Trc2 Mem6[Trc2] S21 dB Mag 5 dB / Ref -25 dB



Trc3 Mem7[Trc3] S21 dB Mag 0.75 dB / Ref -13.45 dB



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

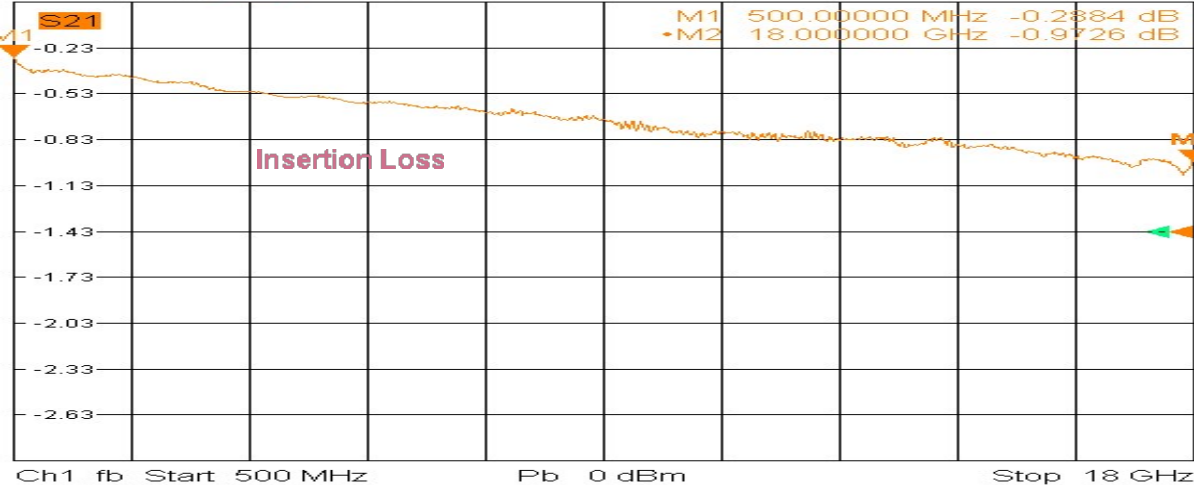


3/14/2020, 4:32 AM

### 2. Insertion Loss



Trc3 Mem7[Trc3] S21 dB Mag 0.3 dB / Ref -1.43 dB Cal Invisible 3 (Max)



3/14/2020, 4:30 AM

