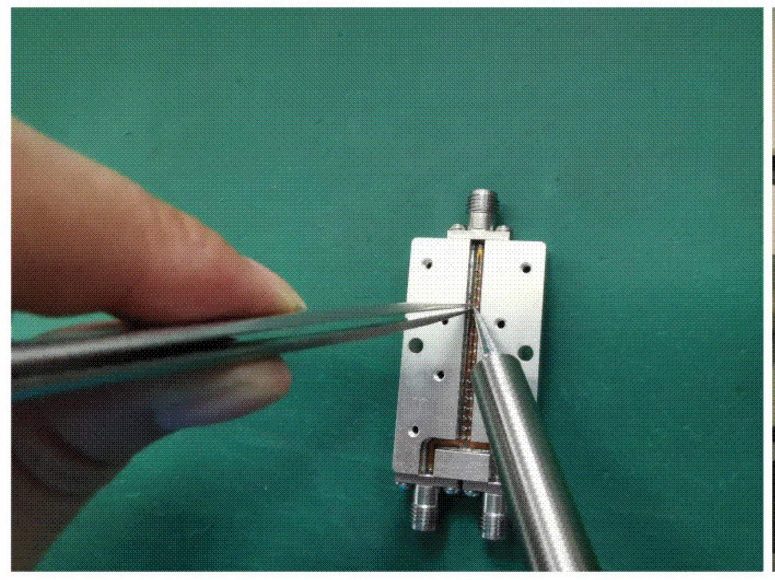
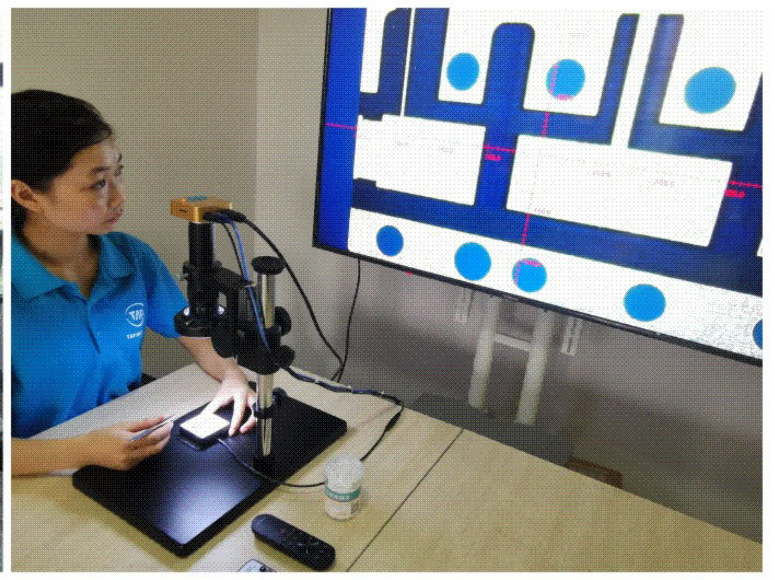
Innovation shapes TAP Microwave's future .

the source of passive components

TAP MW CO., LTD Tel: (86)28.8460.2271 Email: info@ tapmicrowave.com www.tapmicrowave.com

Getting To Know





TAP Microwave is the professional global passive components supplier.

We serve the world some of its reliable products – 0.1-50GHz directional coupler, power divider, hybrid coupler, monopulse comparator, butler matrix, microwave filter, diplexer, combiner, etc. Our products typical applications include: satellite communication base station network and relay ,military and defense equipment, measuring and testing systems.

" response within 8 hours "is our logos of service, and is the key to our quality and success. Our focus is to provide our customers with the highest level of product quality .

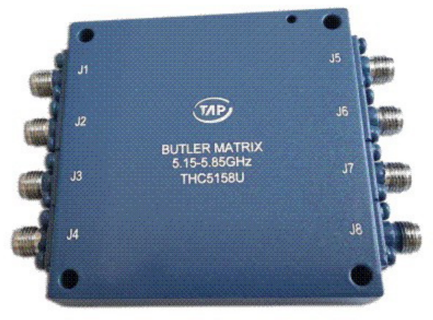
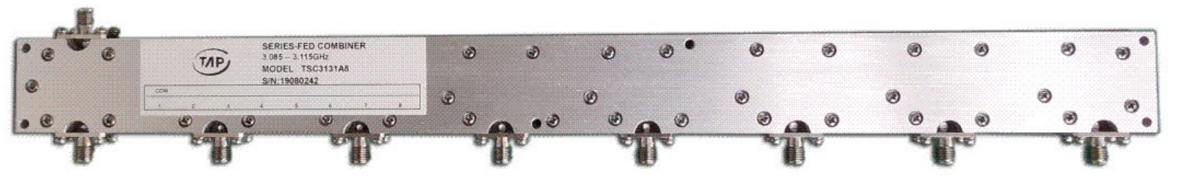
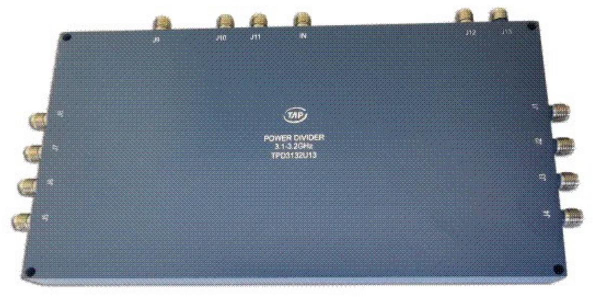
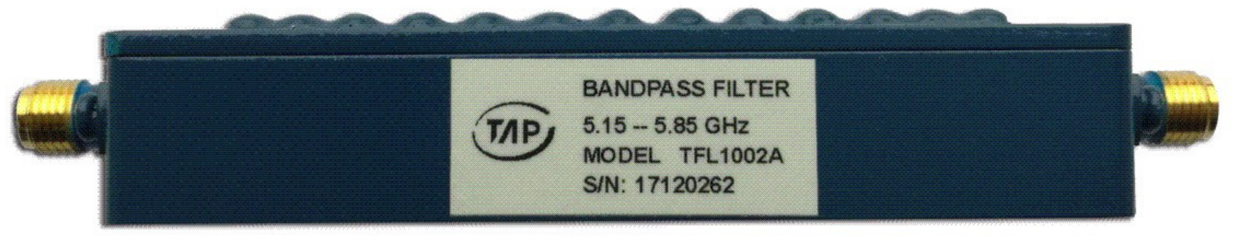
In-house control of all manufacturing processes insures that we according with ISO 9001:2000 quality management system standard from the time your order is placed to the time it is shipped, production delays will be minimized.

TAP is capable of Research & Develop independently, and is improving as well as perfecting itself with the powerful ability and its own advantage. Also we research and development division is constantly evaluating new materials ,plating techniques ,and manufacturing processes in order to provide the highest performing components available.

3 years free Warranty! We proudly offer a 3 years free warranty on all of our reliable, China made passive components. The quality and consistency of our products is why TAP is recognized by ODM's and Carriers as a primary source of supply for passive components.

We believe that the base of business can and must be a 'Honesty'. So that we always offer high quality products on time and support you to achieve enduring business success.

PRODUCTS OVERVIEW

Directional coupler	
Power divider	
Hybrid coupler	 
Beamforming	 
Series-fed Combiner	
Unequal Power Divider	
Filter	

TAP MW CO., LTD Tel: (86)28.8460.2271 Email: info@ tapmicrowave.com www.tapmicrowave.com

Contents

Model TDC05500A10 | 01
0. 5-50GHz 10dB directional coupler

Model TPD20180A32 | 03
2-18GHz 32 way power divider

Model THC20400A | 05
2-40GHz 3dB 90° hybrid coupler

Model TSL0001A | 07
1.23-18GHz highpass filter

Model THC2425U | 08
2. 4-2. 5GHz butler matrix

Model TSC3131A8 | 11
3085-3115MHz 8 way combiner

Broad Band Directional Coupler | 13

Broad Band Power Divider | 15

Hybrid Coupler 90 Degree | 19

Hybrid Coupler 180 Degree | 20

Model TDC05500A10

Features

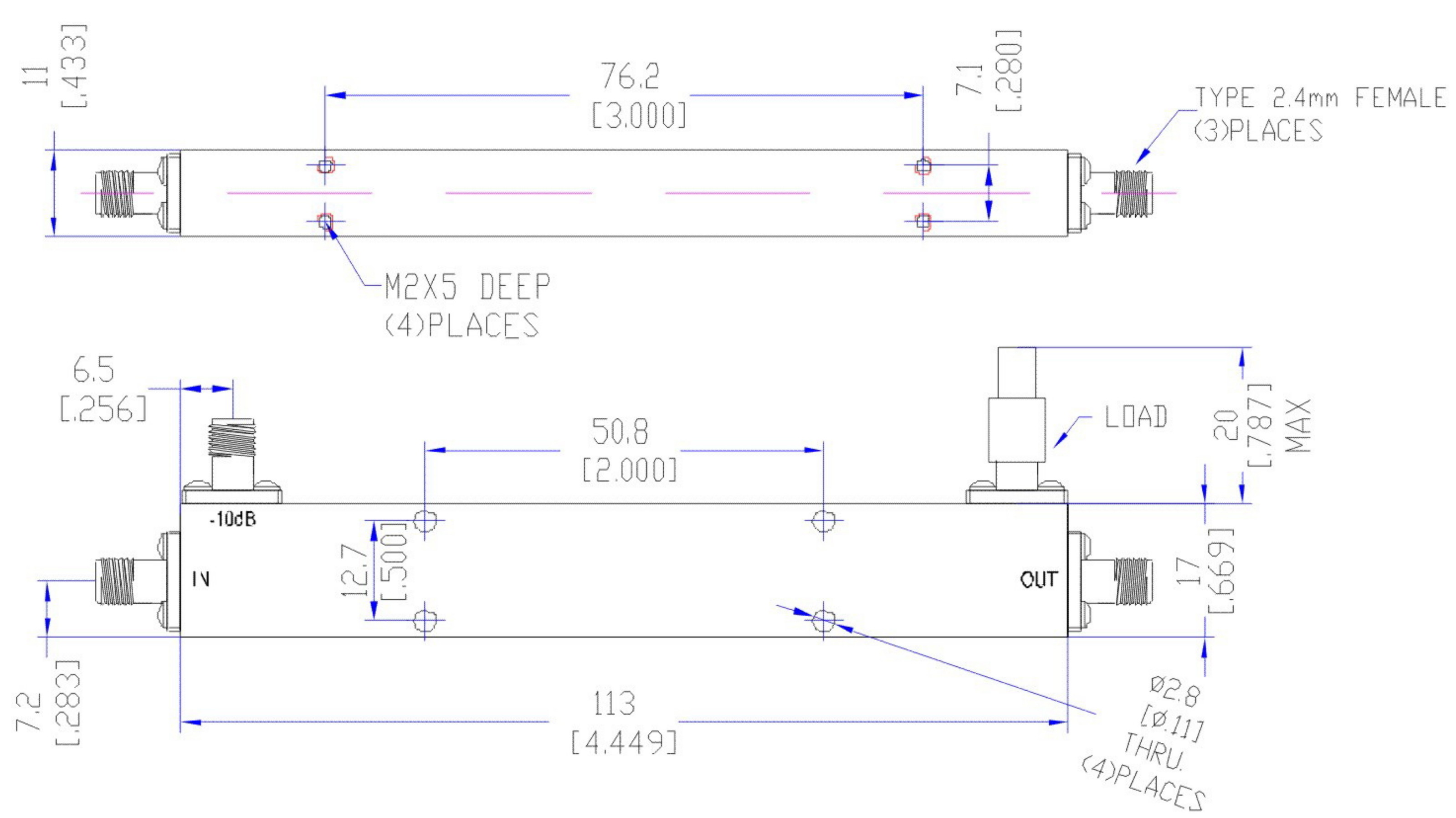
Low VSWR

High Directivity

Broadband &Miniature Size

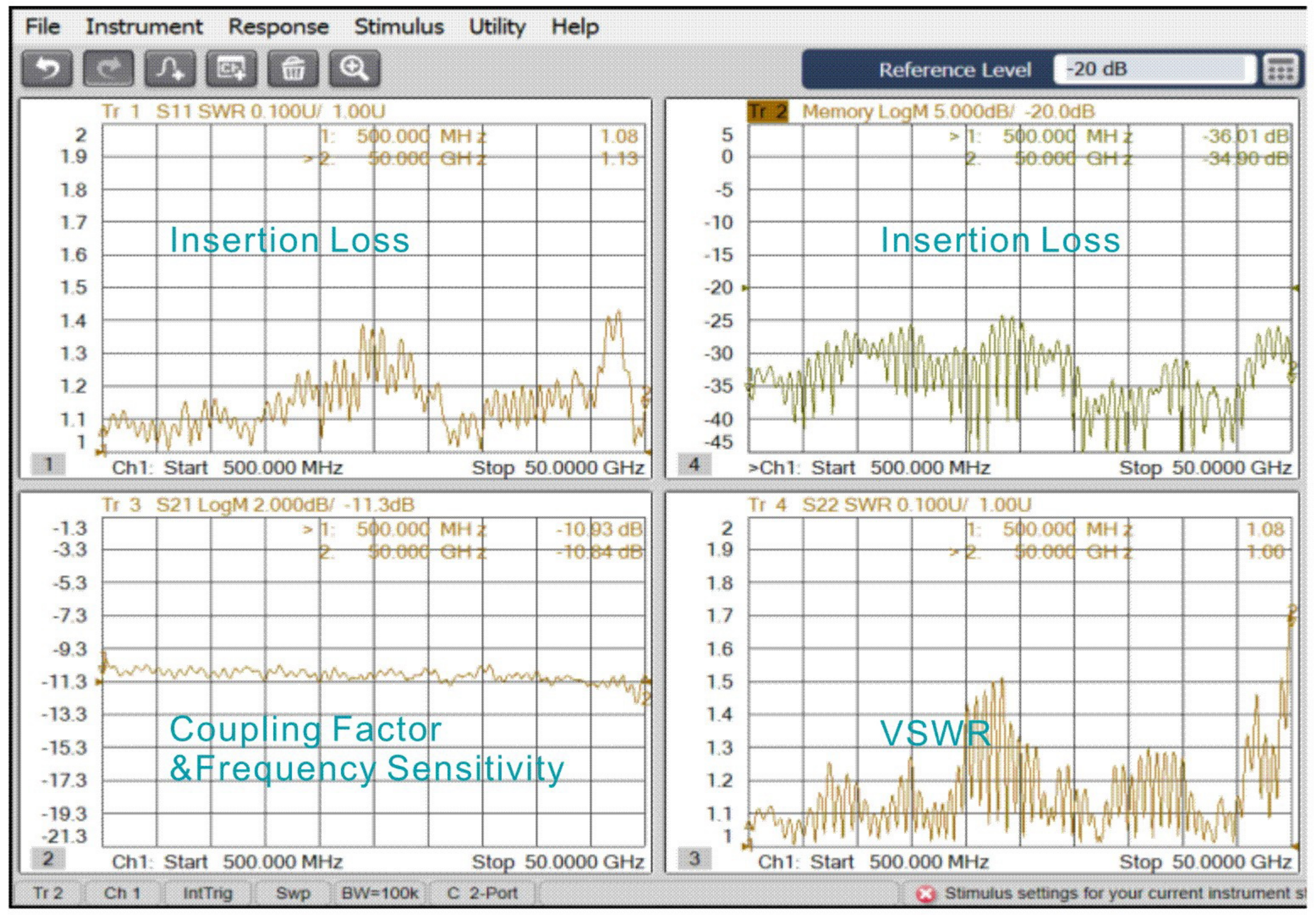
Technical Data Sheet			
Frequency Range	0. 5~50GHz	Finish	Painted Blue_ RAL #5007
Insertion Loss	≤3.4dB (Excl. Coupling Loss 0.46dB)	Connector Body	Passivated Stainless Steel
Coupling Factor	≤10±1. 5dB	Housing	Aluminum, 6061 T6 Clear Chem Conversion Film
Coupling Sensitivity	≤±2.0dB	Connector Pin	Beryllium Copper, Gold Plate
Directivity	≥10dB	Solder	Lead Free, RoHS Compliant
VSWR	Primary ≤1.70:1 Secondary ≤1.90:1	Operating Temperature	-55~+85℃
[1]Power Handling	Incident ≤20Watt; Reflected ≤1Watt	Operating Humidity	Up to 95%,Non- Condensing
Impedance	50Ω	Weight	80g
Port Connectors	2.4mm-Female		

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

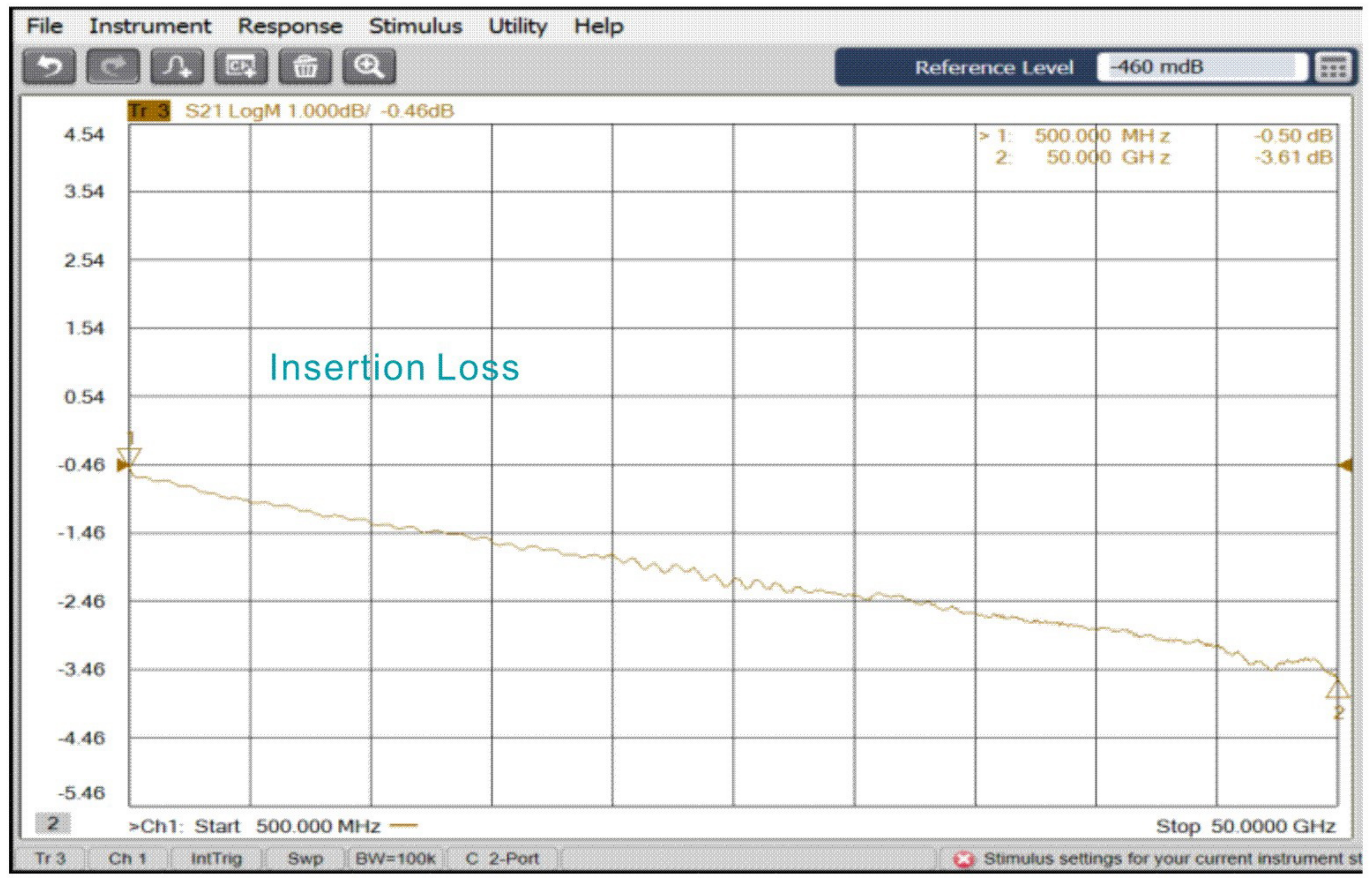


Typical Performance

1. Coupling Factor & Sensitivity, Isolation, VSWR



2. Insertion Loss



Model TPD20180A32

Features

Excellent phase& amplitude balance

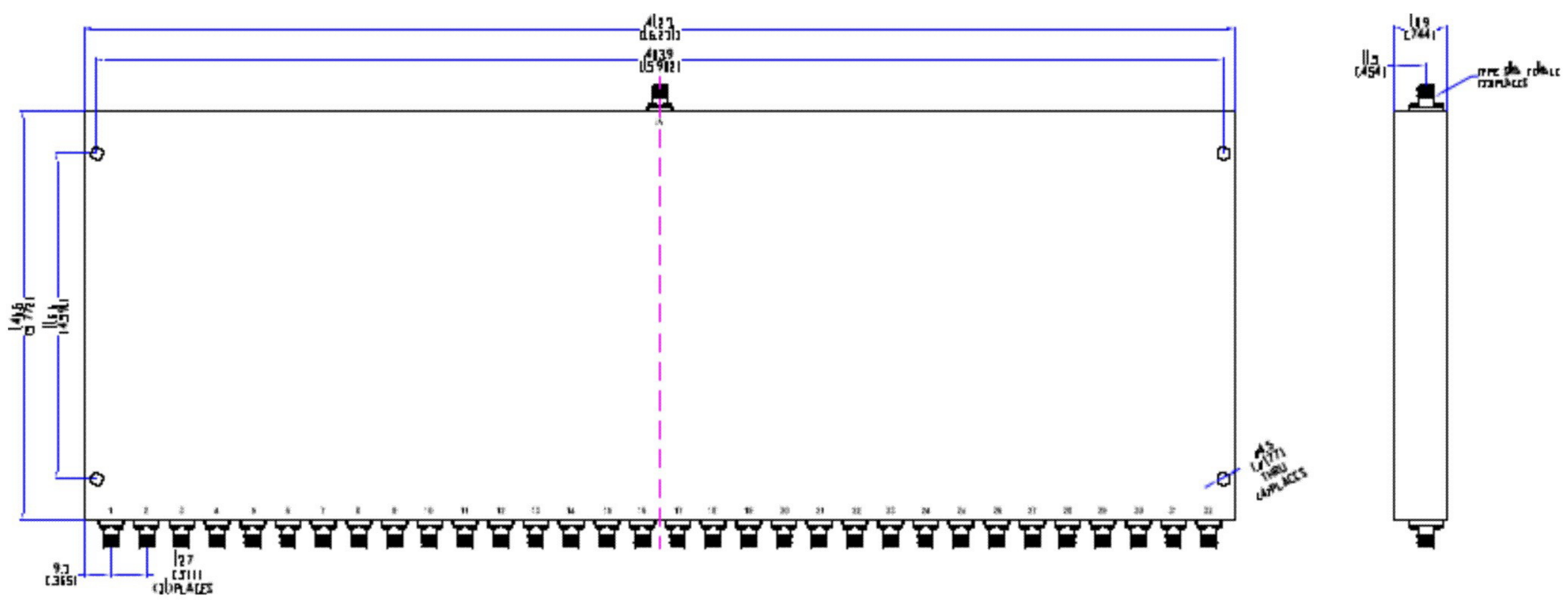
Low Insertion Loss& VSWR

High Isolation

Technical Data Sheet

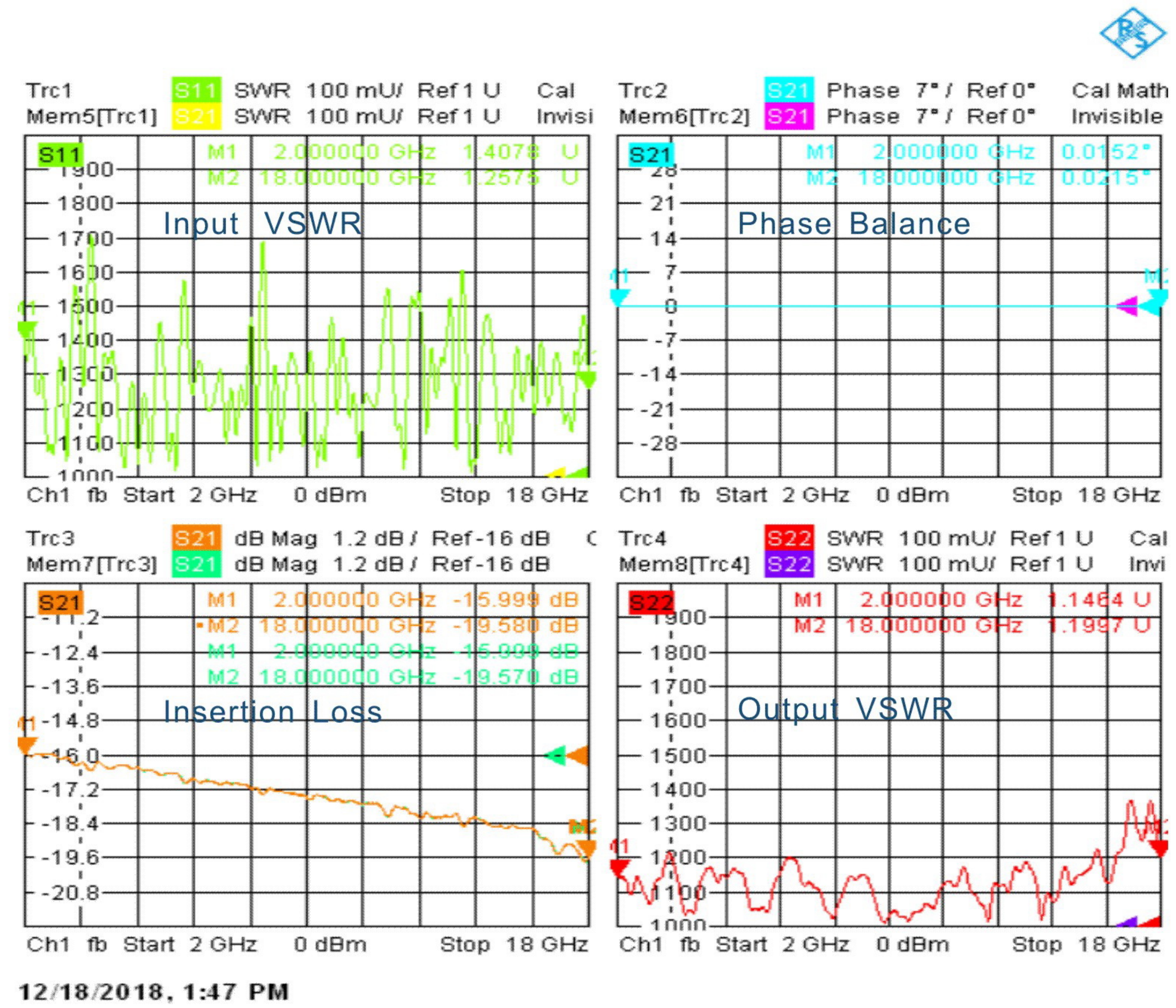
Frequency Range	2~18GHz	Finish	Painted Blue_ RAL #5007
Insertion Loss	≤6.0dB (Above 15.05dB Split)	Connector Body	Passivated Stainless Steel
VSWR	Input ≤1.90:1 Output ≤1.60:1	Housing	Aluminum, 6061 T6 Clear Chem Conversion Film
Isolation	≥15dB	Connector Pin	Beryllium Copper, Gold Plate
Amplitude Balance	≤±1.2dB	Solder	Lead Free, RoHS Compliant
Phase Balance	≤±14°	Operating Temperature	-55~+85℃
[1]Power Handling	Forward ≤30Watt; Reversed ≤1Watt	Operating Humidity	Up to 95%,Non- Condensing
Impedance	50Ω	Weight	3200g
Port Connectors	SMA-Female		

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

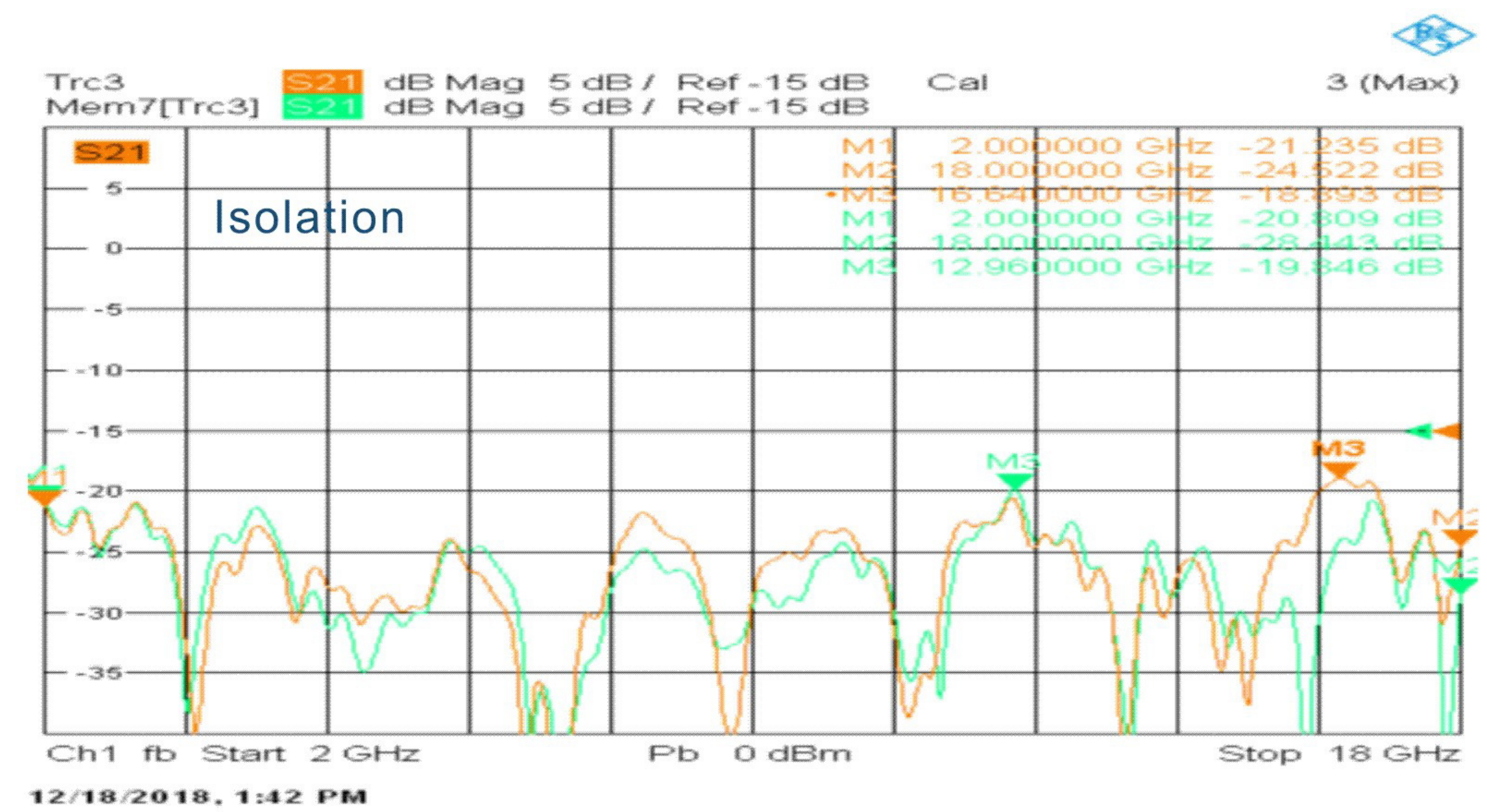


Typical Performance

1. Insertion Loss, Amplitude & Phase Balance, VSWR



2. Isolation



Model THC20400A

Features

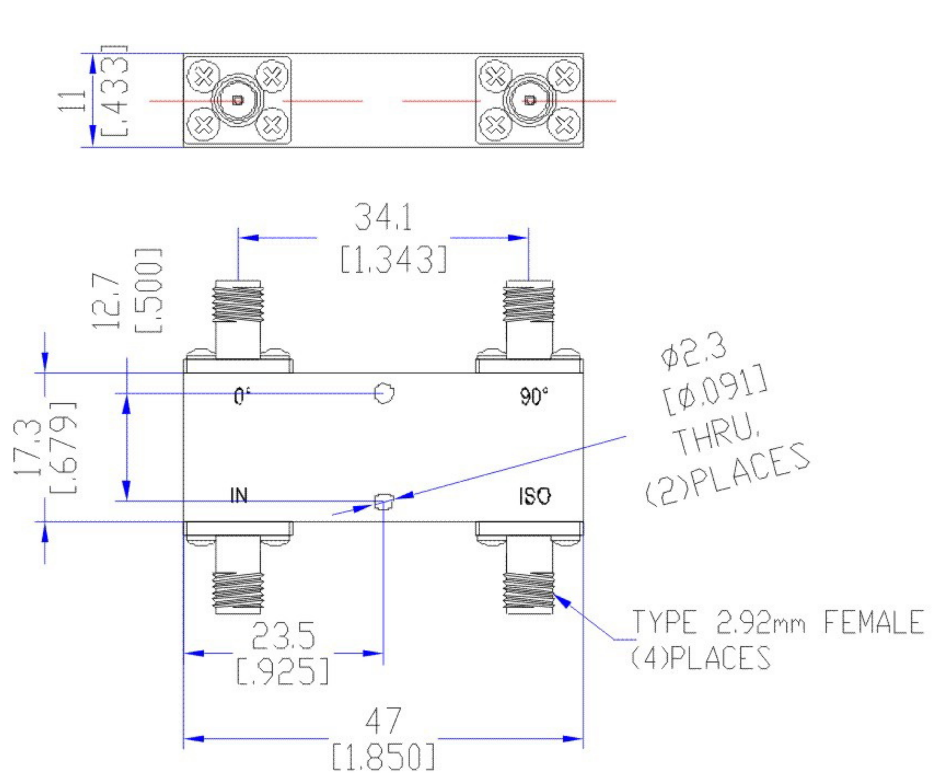
Excellent phase& amplitude balance

Low Insertion Loss& VSWR

High Isolation

Technical Data Sheet			
Frequency Range	2~40GHz	Finish	Painted Blue_ RAL #5007
Nominal Split	3. 01dB	Connector Body	Passivated Stainless Steel
Insertion Loss	≤2. 9dB	Housing	Aluminum, 6061 T6 Clear Chem Conversion Film
Isolation	≥10dB		
Amplitude Balance	≤±1. 4dB	Connector Pin	Beryllium Copper, Gold Plate
Phase Balance	≤±12°	Solder	Lead Free, RoHS Compliant
VSWR	≤1.80:1	Operating Temperature	-55~+85℃
[1]Power Handling	Average ≤10Watt Peak ≤1KW	Operating Humidity	Up to 95%,Non- Condensing
Impedance	50Ω	Weight	30g
Port Connectors	2. 92mm-Female		

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

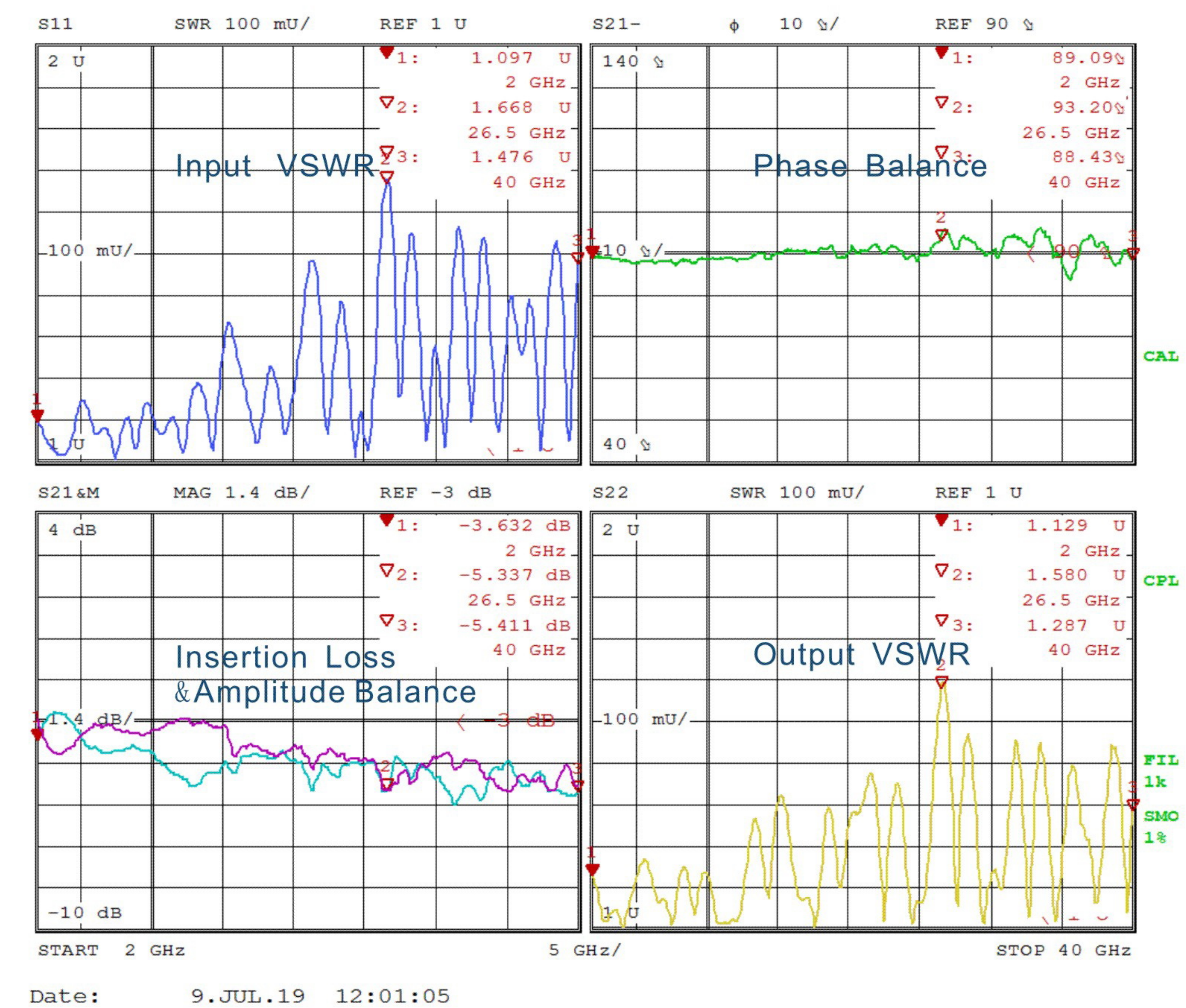


Typical Performance

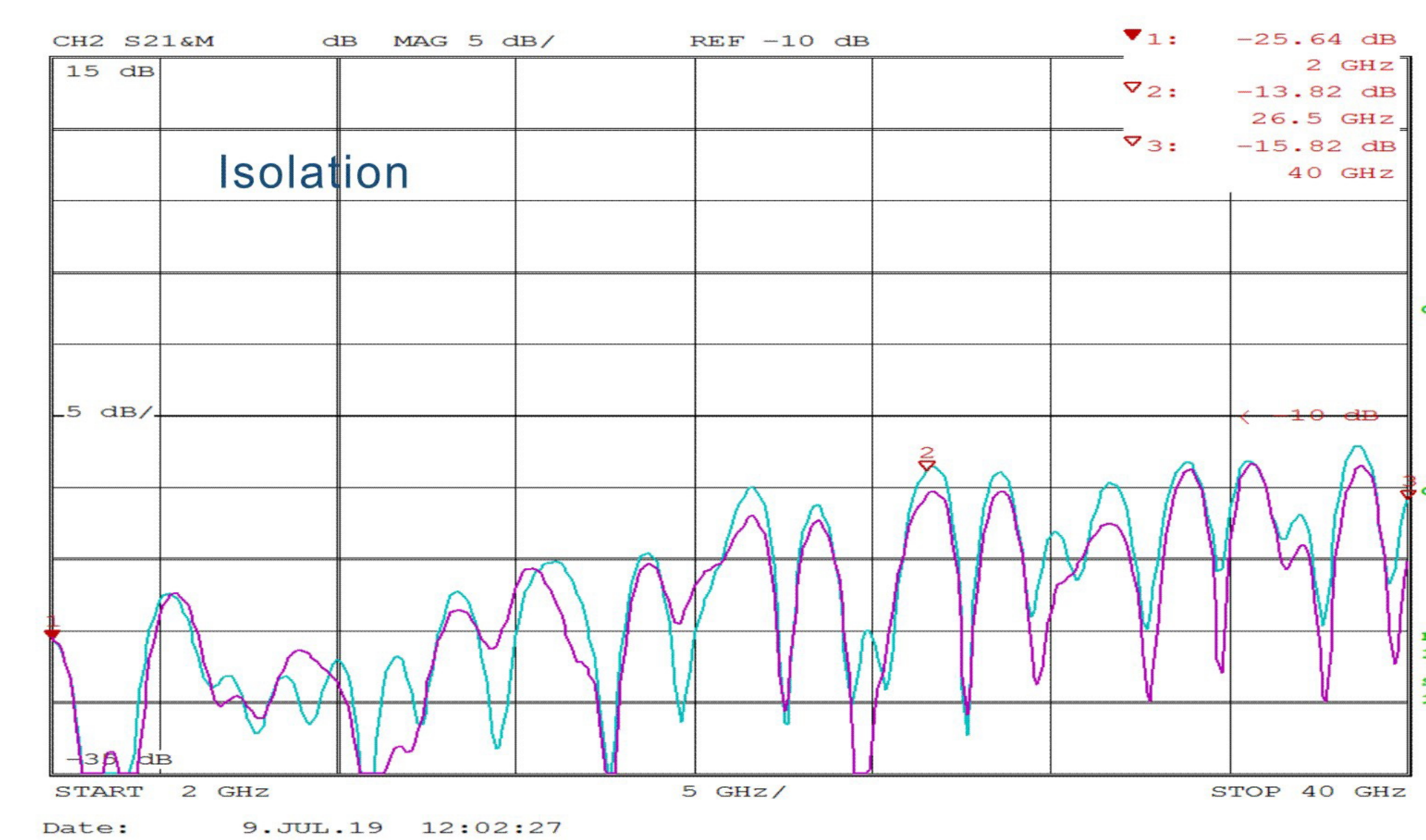
1. Insertion Loss,

Amplitude& Phase Balance,

VSWR



2. Isolation



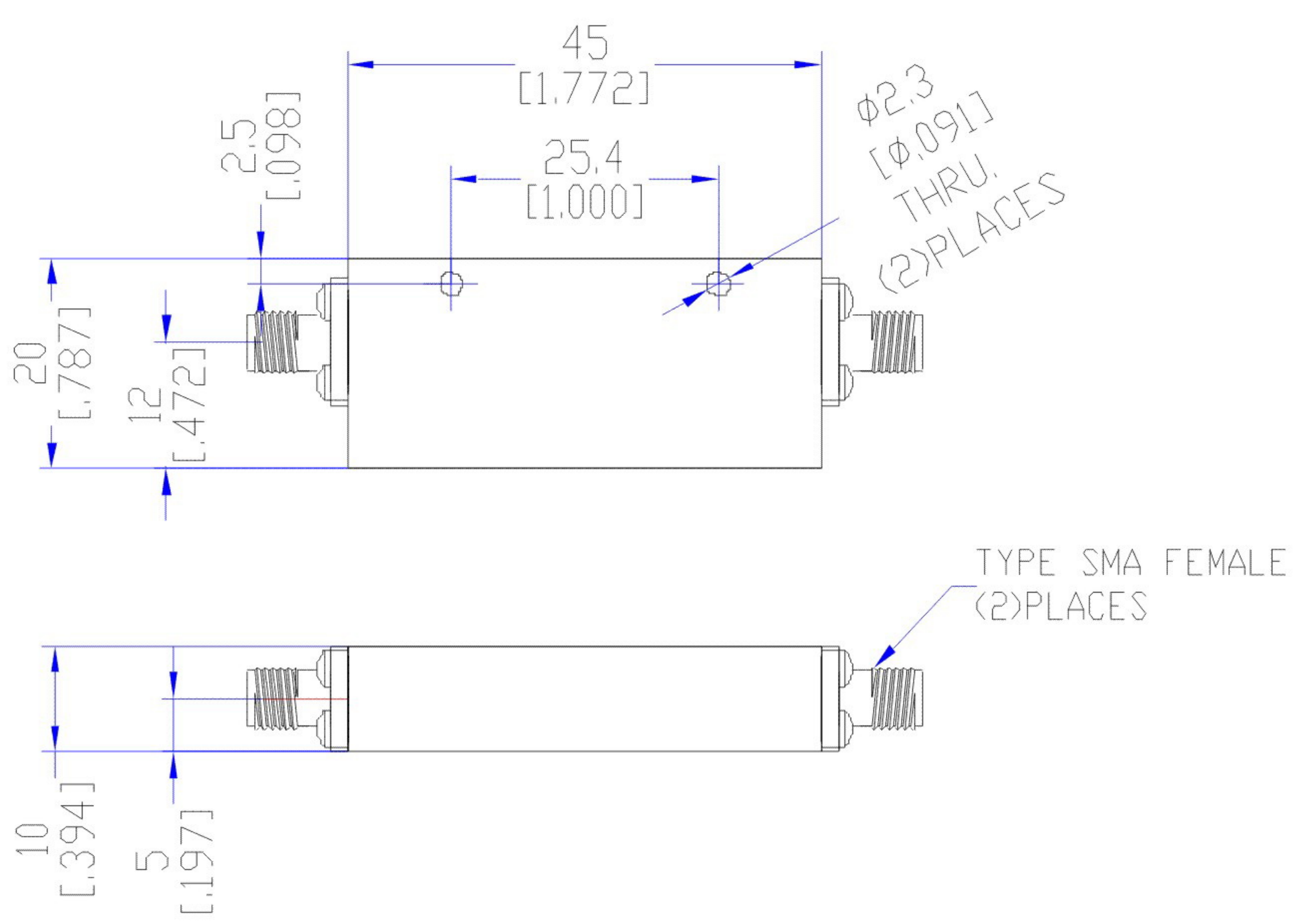
Model TSL0001A

Electrical Specifications	
Frequency Range	1.23～18GHz
Insertion Loss	≤2.0dB@1.23~5GHz
	≤2. 5dB@5~18GHz
VSWR	≤3.50:1@1.23~5GHz
	≤2.50:1@5~18GHz
Stop Band Attenuation	≥60dB@DC~0.8GHz
Port Connectors	SMA-Female
Power Handling	≤10Watt CW

Environmental Parameters

Operating Temperature -20～+65℃
Operating Humidity Up to 90%,Non- Condensing

Outline Drawing



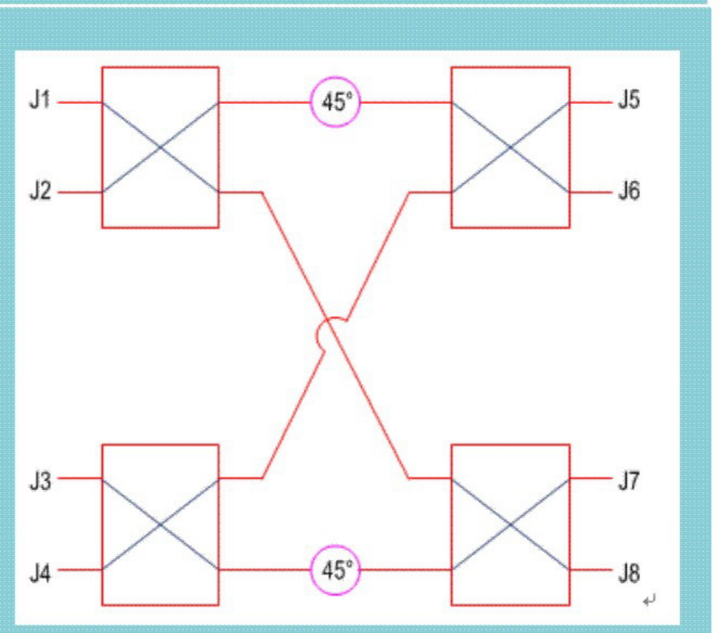
Model THC2425U

Electrical Specifications	
Frequency Range	1.23～18GHz
Insertion Loss	≤2.5dB@1.2~1.5GHz
Amplitude Balance	≤2 .0dB@1.55~15GHz
Phase Balance	≤3.5dB@15.5 ~18GHz
Isolation	≤2.5@1.55~1.5GHz
VSWR	≤2.5@1.55~15GHz
Power Handling	≤3.5: 1@15. 5 ~18GHz
Impedance	≥40dB@DC~0.8GHz
Port Connectors	SMA-Female
Surface Color	≤10Watt CW
Weight	360g

Phase Specification Table

Status	J1	J2	J3	J4
J5	0	-135	-90	-135
J6	-90	-45	0	-45
J7	-45	0	-45	-90
J8	-135	-90	-135	0

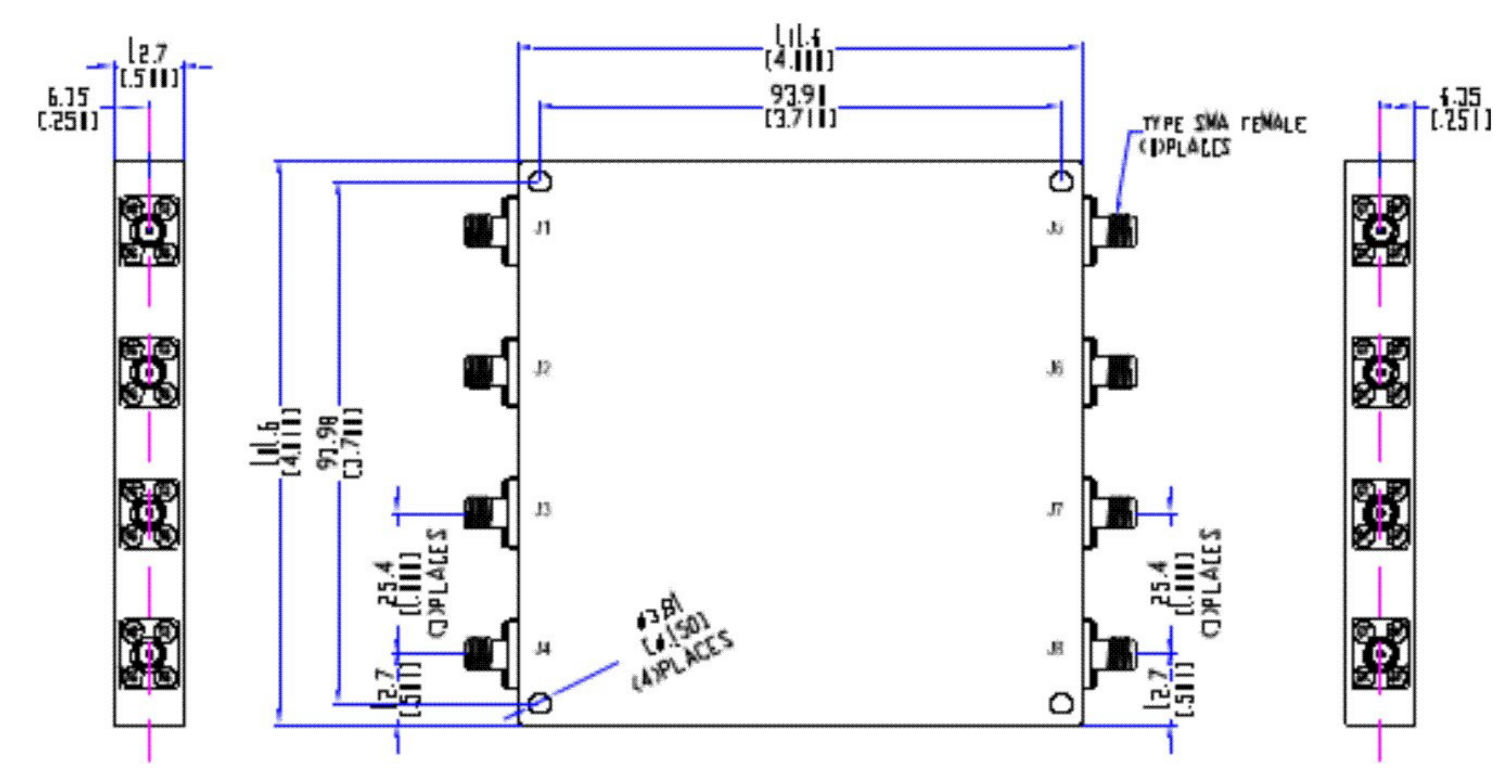
Block Diagram



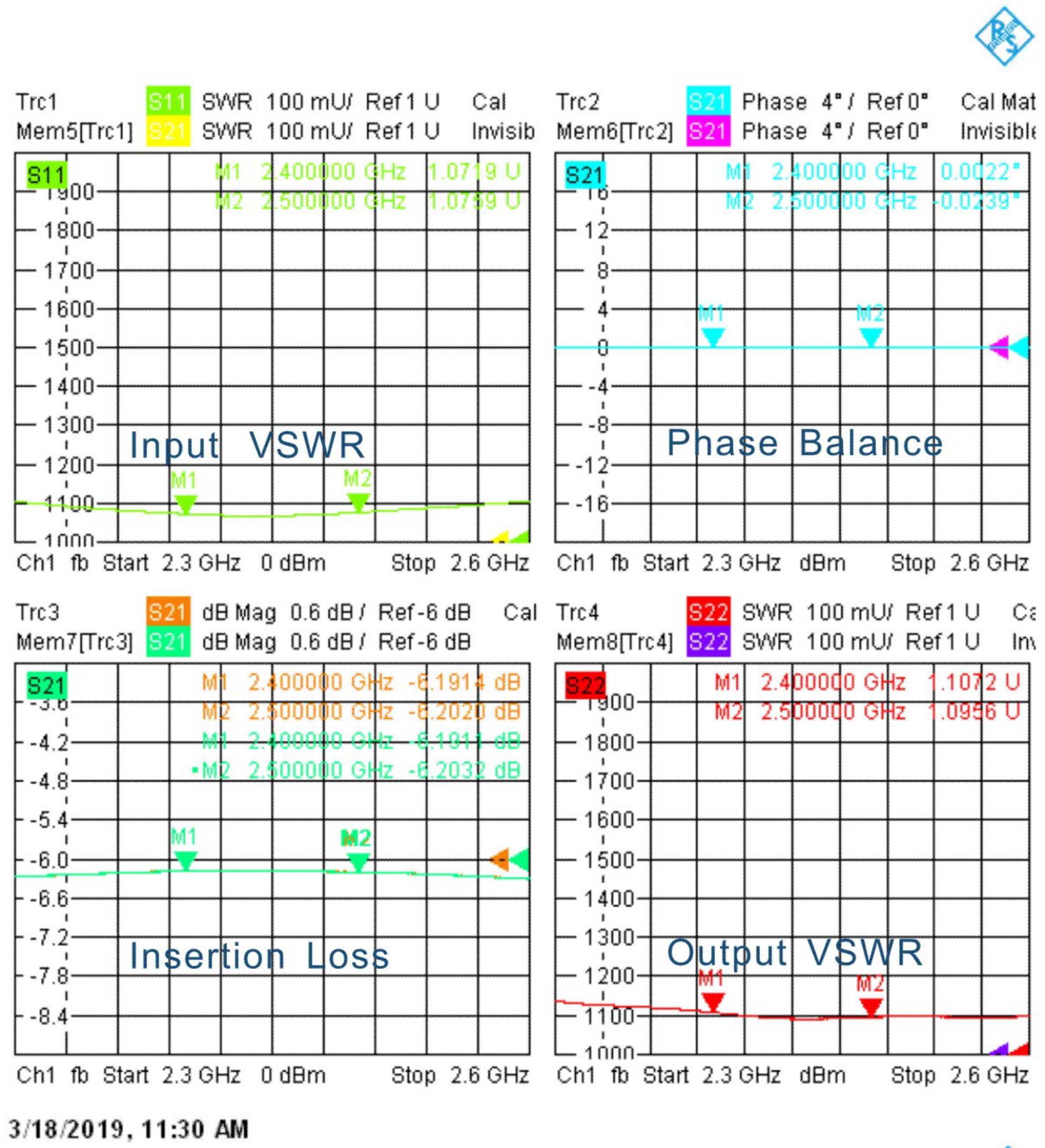
Environmental Parameters

Operating Temperature -40～+85℃
Operating Humidity Up to 90%,Non- Condensing

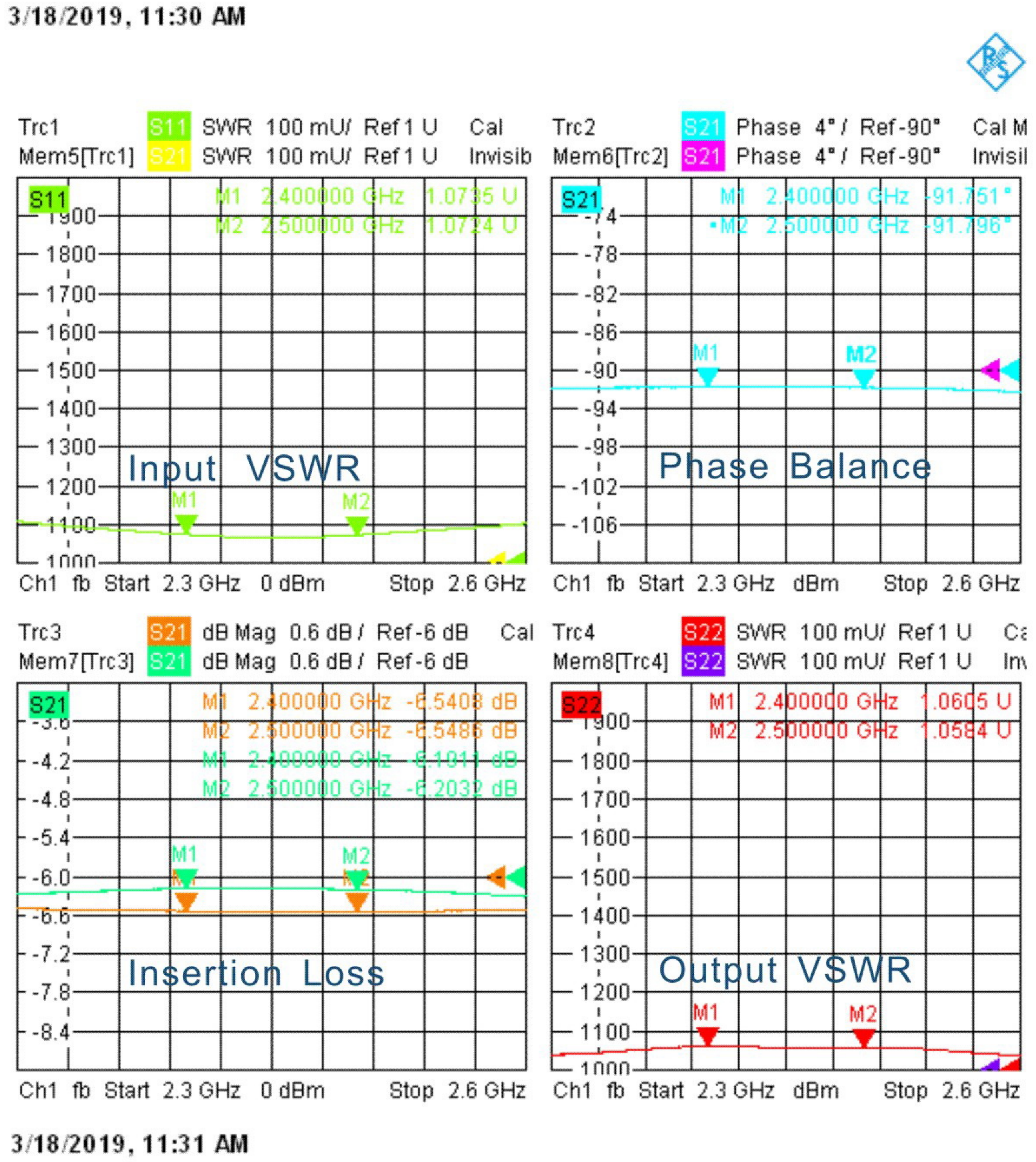
Outline Drawing



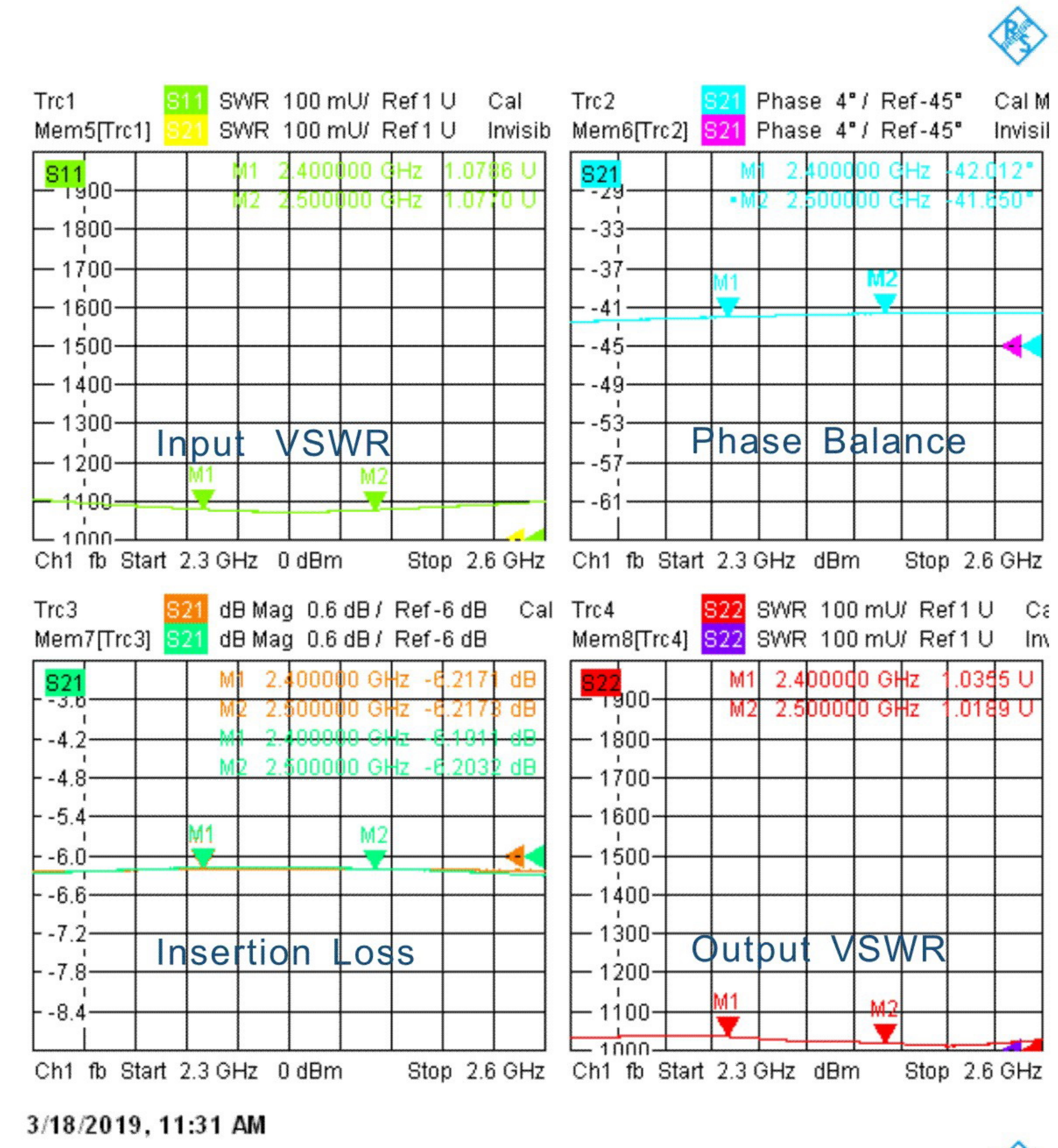
J1 to J5_ Insertion Loss,
Amplitude& Phase Balance,
VSWR _ 0°



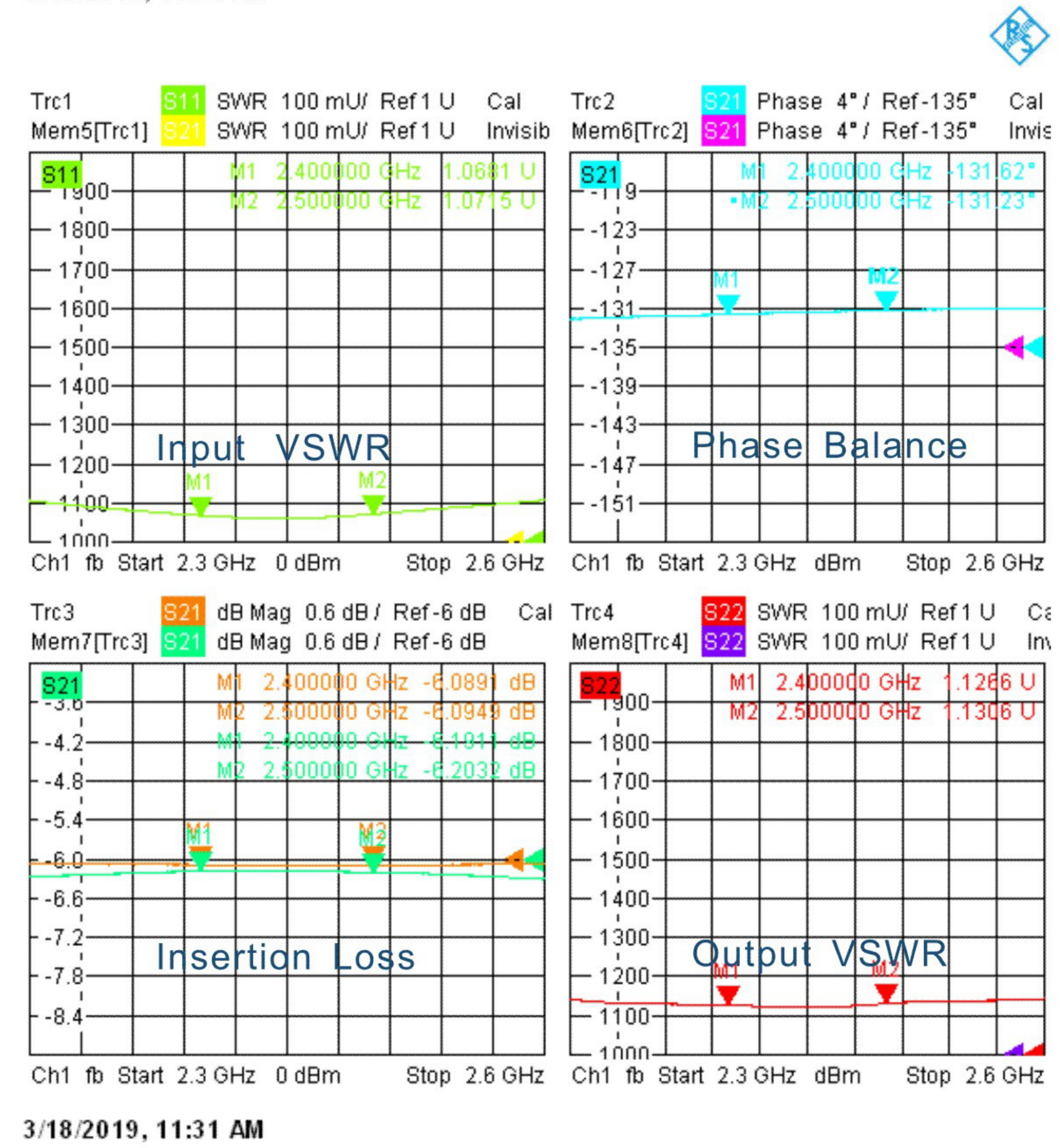
J1 to J6_ Insertion Loss,
Amplitude& Phase Balance,
VSWR _ -90°



J1 to J7_ Insertion Loss,
Amplitude& Phase Balance,
VSWR _ -45°



J1 to J8_ Insertion Loss,
Amplitude& Phase Balance,
VSWR _ -135°



Model TSC3131A8

Features

Excellent phase& amplitude balance

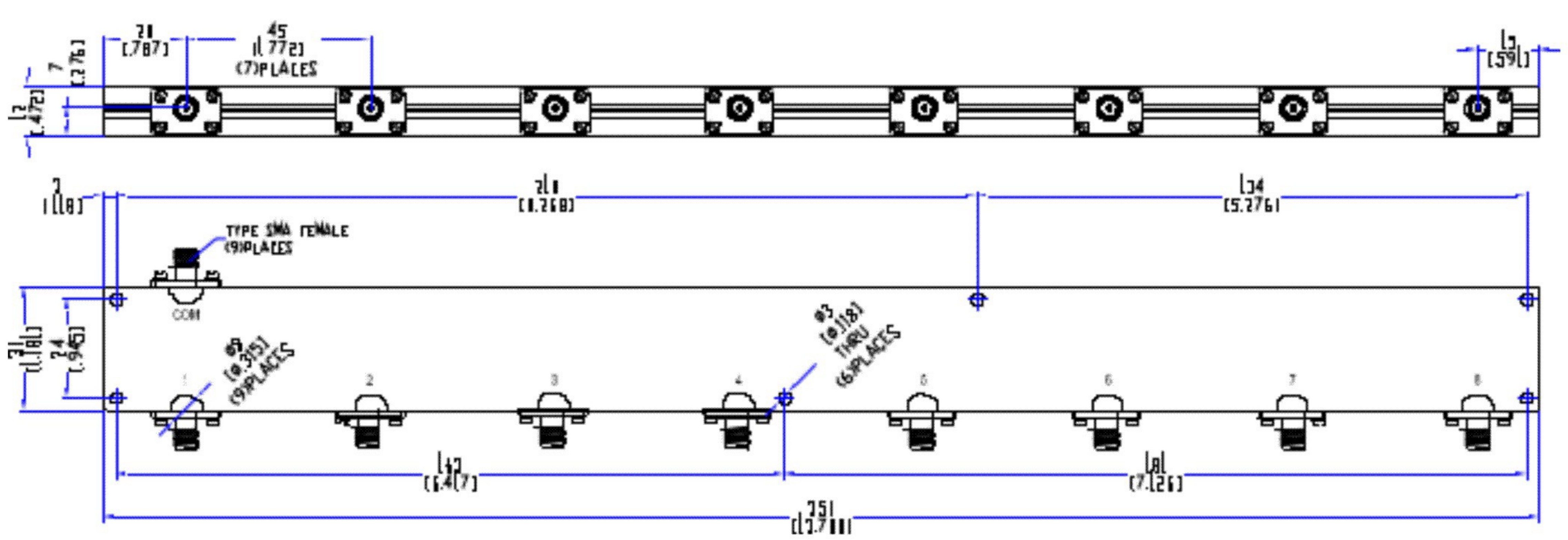
Low Insertion Loss& VSWR

High Isolation

Technical Data Sheet

Frequency Range	3085~3115MHz	Finish	Anodized
Insertion Loss	≤0.8dB (Above 9. 03dB Split)	Connector Body	Passivated Stainless Steel
VSWR	Input ≤1.30:1 Output ≤1.20:1	Housing	Aluminum, 6061 T6 Clear Chem Conversion Film
Isolation	≥20dB	Connector Pin	Beryllium Copper, Gold Plate
Amplitude Balance	≤±0.3dB	Solder	Lead Free, RoHS Compliant
Phase Balance	≤12°	Operating Temperature	-55~+85℃
[1]Power Handling	Peak Power ≤ 300W Duty Factor ≤ 3% Pulse Width≤ 3ms	Operating Humidity	Up to 95%,Non- Condensing
Impedance	50Ω	Weight	350g
Port Connectors	SMA-Female		

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

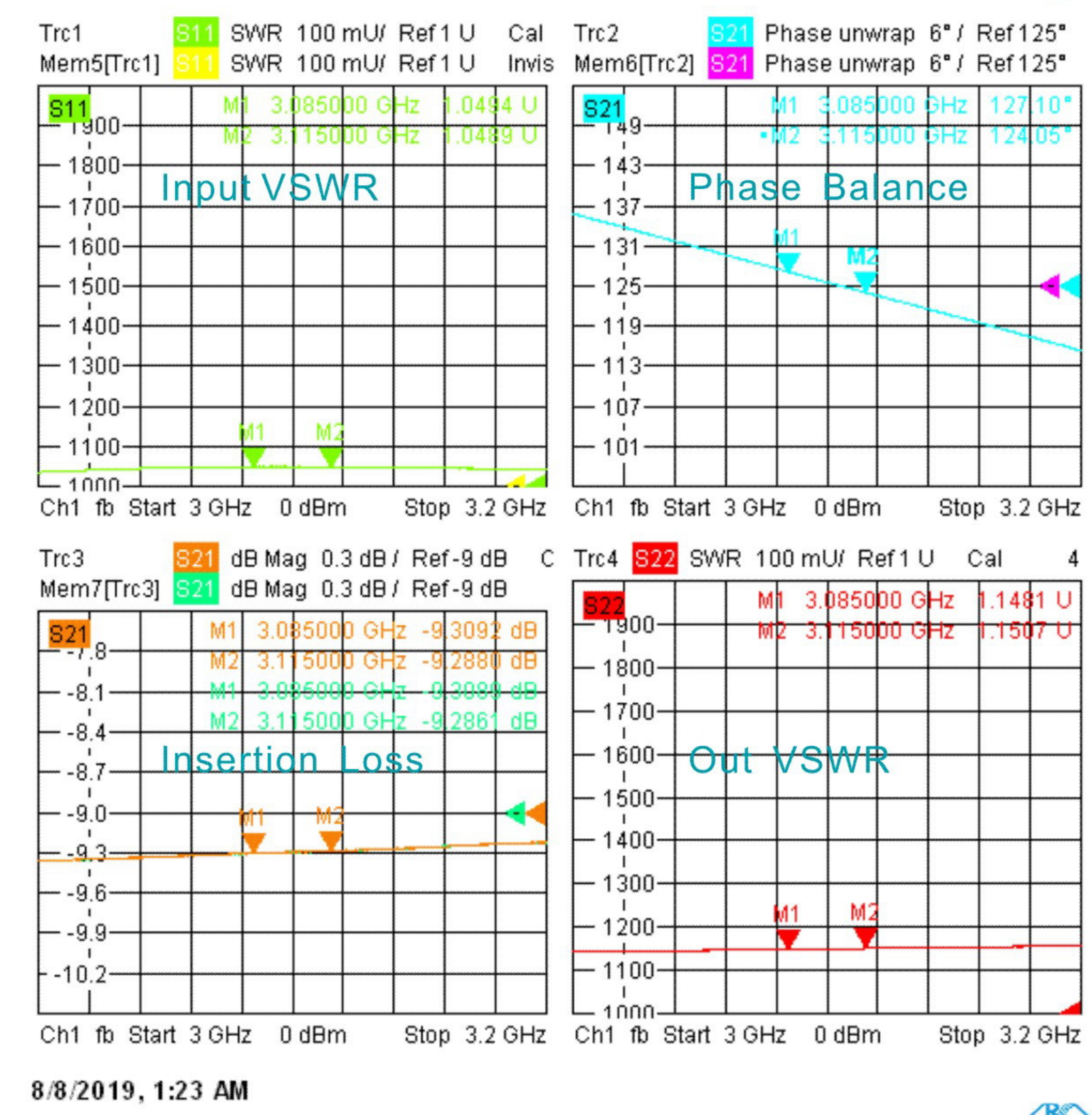


Typical Performance

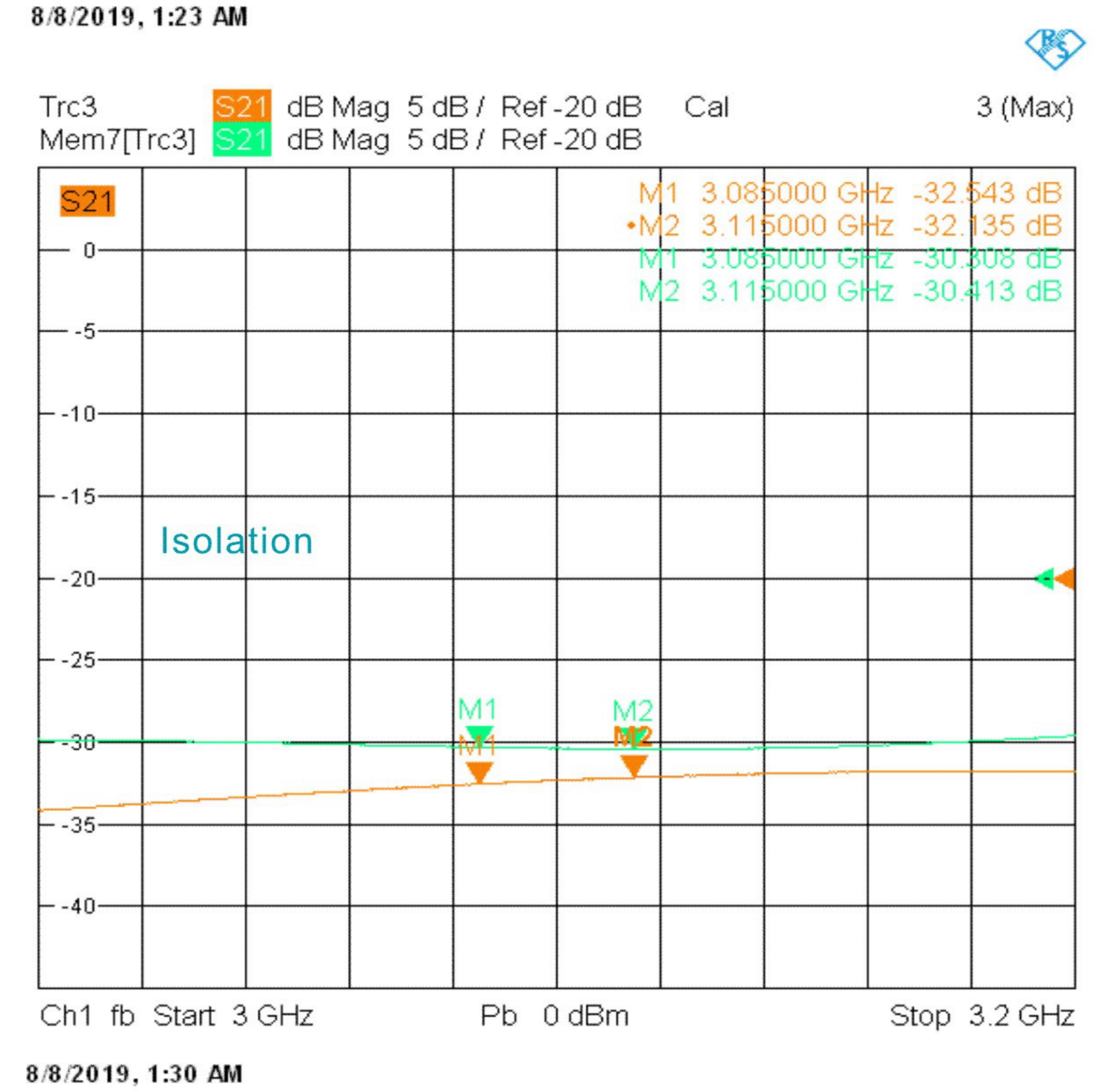
1. Insertion Loss,

Amplitude& Phase Balance,

VSWR



2. Insertion Loss



the source of passive components

Broad Band Directional Coupler

Part Number	Freq. GHz	Coupling dB	Freq. Sens. dB	Loss dB Max Excluding Coupling	Directivity dB	VSWR Max Pri. Line	VSWR Max Sec. Line	Power Watts Average Incident	Power Watts Average Reflected	Power Watts Peak
TDC05400A10 TDC05400A13 TDC05400A20	0.5-40	10±1.0 13±1.0 20±1.5	±1.2 ±1.2 ±1.5	2.8 2.6 2.4	10 10 10	1.70 1.70 1.70	1.70 1.70 1.70	10 10 10	5 10 10	1K 1K 1K
TDC10400A10 TDC10400A13 TDC10400A20	1-40	10±1.0 13±1.0 20±1.5	±1.2 ±1.2 ±1.5	2.2 2.0 2.0	10 10 10	1.70 1.70 1.70	1.70 1.70 1.70	10 10 10	5 10 10	1K 1K 1K
TDC20400A10 TDC20400A13 TDC20400A20	2-40	10±1.0 13±1.0 20±1.5	±1.0 ±1.2 ±1.5	1.6 1.6 1.6	12 12 10	1.60 1.60 1.60	1.60 1.60 1.60	10 10 10	5 10 10	1K 1K 1K
TDC100400A10 TDC100400A13 TDC100400A20	10-40	10±1.0 13±1.0 20±1.5	±1.0 ±1.0 ±1.2	1.4 1.4 1.4	12 12 10	1.60 1.60 1.60	1.60 1.60 1.60	10 10 10	5 10 10	1K 1K 1K
TDC0520A6 TDC0520A10 TDC0520A20 TDC0520A30	0.5-2	6±1.0 10±1.0 20±1.0 30±1.0	±0.7 ±0.7 ±0.7 ±1.0	0.5 0.5 0.4 0.3	23 23 23 20	1.20 1.20 1.20 1.20	1.20 1.20 1.20 1.20	20 50 50 50	2 5 50 50	3K 3K 3K 3K
TDC0825A6 TDC0825A10 TDC0825A20 TDC0825A30	0.8-2.5	6±0.7 10±0.7 20±1.0 30±1.0	±.0.7 ±0.7 ±0.7 ±0.7	0.5 0.5 0.4 0.3	23 23 23 20	1.20 1.20 1.20 1.20	1.20 1.20 1.20 1.20	20 50 50 50	2 5 50 50	3K 3K 3K 3K
TDC1040A6 TDC1040A10 TDC1040A20 TDC1040A30	1-4	6±0.7 10±0.7 20±1.0 30±1.0	±.0.7 ±0.7 ±0.7 ±0.7	0.5 0.5 0.4 0.4	22 22 22 20	1.20 1.20 1.20 1.20	1.20 1.20 1.20 1.20	20 50 50 50	2 5 50 50	3K 3K 3K 3K
TDC2080A6 TDC2080A10 TDC2080A20 TDC2080A30	2-8	6±0.7 10±0.7 20±1.0 30±1.0	±.0.7 ±0.7 ±0.7 ±0.7	0.5 0.5 0.4 0.4	20 20 20 20	1.20 1.20 1.20 1.20	1.20 1.20 1.20 1.20	20 50 50 50	2 5 50 50	3K 3K 3K 3K
TDC70124A6 TDC70124A10 TDC70124A20	7-12.4	6±0.7 10±0.7 20±1.0	±0.7 ±0.7 ±1.0	0.5 0.5 0.4	17 17 17	1.30 1.30 1.30	1.30 1.30 1.30	20 50 50	2 5 50	3K 3K 3K
TDC05180A10 TDC05180A20 TDC05180A30	0.5-18	10±1.0 20±1.0 30±1.2	±1.0 ±1.0 ±1.5	1.0 1.1 1.1	0.5-12.4/12.4-18 15/12 15/12 15/8	1.40 1.40 1.50	1.50 1.50 1.50	50 50 50	5 50 50	3K 3K 3K
TDC10180A10 TDC10180A20 TD10180A30	1-18	10±1.0 20±1.0 30±1.2	±1.0 ±1.0 ±1.2	0.9 0.8 0.8	1-12.4/12.4-18 15/12 15/12 12/10	1.40 1.40 1.40	1.50 1.50 1.50	50 50 50	5 50 50	3K 3K 3K
TDC20180A6 TDC20180A10 TDC20180A20 TDC20180A30	2-18	6±1.0 10±1.0 20±1.0 30±1.0	±0.7 ±0.7 ±0.7 ±1.0	0.9 0.8 0.8 0.8	2-12.4/12.4-18 15/12 15/12 15/12 12/10	1.40 1.40 1.40 1.40	1.50 1.50 1.50 1.50	50 50 50 50	2 5 50 50	3K 3K 3K 3K
TDC40180A6 TDC40180A10 TDC40180A20 TDC40180A30	4-18	6±1.00 10±1.0 20±1.0 30±1.0	±0.7 ±0.7 ±0.7 ±1.0	0.7 0.7 0.6 0.6	4-12.4/12.4-18 15/12 15/12 15/10 12/10	1.35 1.35 1.40 1.40	1.40 1.40 1.40 1.50	50 50 50 50	2 5 50 50	3K 3K 3K 3K

Broad Band Power Dividers

the source of passive components

Part Number	No. of ways	Frequency Range	Insertion Loss	Amplitude Balance	Phase Balance	Isolation	VSWR	Power
TPD20400A2	2-way	2.0-40GHz	2.50dB	±0.50dB	±5°	16dB	1.70:1	10W
TPD60400A2	2-way	6.0-40GHz	1.60dB	±0.50dB	±5°	16dB	1.60:1	10W
TPD100400A2	2-way	10-40GHz	1.50dB	±0.50dB	±5°	16dB	1.70:1	10W
TPD10265A2	2-way	1.0-26.5GHz	2.00dB	±0.50dB	±5°	16dB	1.50:1	10W
TPD20180A2	2-way	2.0-18GHz	1.00dB	±0.30dB	±3°	20dB	1.40:1	30W
TPD20180A3	3-way	2.0-18GHz	1.60dB	±0.70dB	±9°	20dB	1.65:1	30W
TPD20180A4	4-way	2.0-18GHz	1.80dB	±0.50dB	±12°	17dB	1.60:1	30W
TPD20180A8	8-way	2.0-18GHz	2.60dB	±0.80dB	±10°	16dB	1.70:1	30W
TPD20180A16	16-way	2.0-18GHz	3.50dB	±1.00dB	±8°	16dB	1.80:1	30W
TPD20180A32	32-way	2.0-18GHz	6.00dB	±1.20dB	±14°	15dB	1.90:1	30W
TPD05180A2	2-way	0.5-18GHz	2.00dB	±0.50dB	±5°	14dB	1:50:1	30W
TPD05180A4	4-way	0.5-18GHz	5.50dB	±0.60dB	±6°	14dB	1.90:1	30W
TPD05180A8	8-way	0.5-18GHz	8.00dB	±1.00dB	±9°	14dB	2.00:1	10W
TPD05180A16	16-way	0.5-18GHz	12.0dB	±1.50dB	±9°	14dB	2.00:1	30W
TPD0105A2	2-way	100-520MHz	0.6dB	±0.20dB	±2°	18dB	1.25:1	50W
TPD0305A2	2-way	380-520MHz	0.3dB	±0.20dB	±2°	22dB	1.20:1	50W
TPD0305A3	3-way	380-520MHz	0.5dB	±0.30dB	±3°	18dB	1.30:1	50W
TPD0305A4	4-way	380-520MHz	0.6dB	±0.30dB	±3°	20dB	1.30:1	50W
TPD0305A8	8-way	380-520MHz	0.9dB	±0.30dB	±3°	20dB	1.40:1	50W
TPD0305A3	2-way	380-520MHz	0.5dB	±0.30dB	±3°	18dB	1.30:1	50W
TPD0305A4	2-way	380-520MHz	0.6dB	±0.30dB	±3°	20dB	1.30:1	50W
TPD0408A2	2-way	400-800MHz	0.6dB	±0.20dB	±2°	18dB	1.30:1	50W
TPD0510A2	2-way	0.5-1.0GHz	0.30dB	±0.20dB	±2°	22dB	1.20:1	30W
TPD0510A3	3-way	0.5-1.0GHz	0.60dB	±0.40dB	±3°	20dB	1.30:1	30W
TPD0510A4	4-way	0.5-1.0GHz	0.40dB	±0.30dB	±3°	22dB	1.20:1	30W
TPD0510A6	6-way	0.5-1.0GHz	0.70dB	±0.30dB	±3°	18dB	1.30:1	30W
TPD0510A8	8-way	0.5-1.0GHz	0.80dB	±0.30dB	±3°	20dB	1.30:1	30W
TPD0510A10	10-way	0.5-1.0GHz	0.90dB	±0.60dB	±6°	18dB	1.50:1	30W
TPD0510A12	12-way	0.5-1.0GHz	1.00dB	±0.60dB	±6°	18dB	1.50:1	30W
TPD0510A16	16-way	0.5-1.0GHz	1.20dB	±0.50dB	±5°	20dB	1.40:1	30W
TPD1020A2	2-way	1.0-2.0GHz	0.35dB	±0.20dB	±2°	22dB	1.20:1	30W

TAP MW CO., LTD   Tel: (86)28.8460.2271   Email: info@ tapmicrowave.com   www.tapmicrowave.com

the source of passive components

Broad Band Power Divider

Part Number	No. of ways	Frequency Range	Insertion Loss	Amplitude Balance	Phase Balance	Isolation	VSWR	Power
TPD1020A3	3-way	1.0-2.0GHz	0.60dB	±0.30dB	±3°	18dB	1.30:1	30W
TPD1020A4	4-way	1.0-2.0GHz	0.60dB	±0.20dB	±2°	22dB	1.25:1	30W
TPD1020A6	6-way	1.0-2.0GHz	0.90dB	±0.50dB	±5°	18dB	1.30:1	30W
TPD1020A8	8-way	1.0-2.0GHz	0.90dB	±0.30dB	±3°	22dB	1.30:1	30W
TPD1020A16	16-way	1.0-2.0GHz	1.40dB	±0.40dB	±5°	20dB	1.40:1	30W
TPD1020A20	20-way	1.0-2.0GHz	1.30dB	±0.50dB	±6°	18dB	1.40:1	30W
TPD2040A2	2-way	2.0-4.0GHz	0.35dB	±0.20dB	±2°	20dB	1.25:1	30W
TPD2040A3	3-way	2.0-4.0GHz	0.60dB	±0.30dB	±3°	20dB	1.30:1	30W
TPD2040A4	4-way	2.0-4.0GHz	0.60dB	±0.20dB	±3°	20dB	1.30:1	30W
TPD2040A6	6-way	2.0-4.0GHz	1.00dB	±0.50dB	±5°	20dB	1.40:1	30W
TPD2040A8	8-way	2.0-4.0GHz	1.00dB	±0.40dB	±5°	20dB	1.40:1	30W
TPD2040A12	12-way	2.0-4.0GHz	1.30dB	±0.50dB	±5°	20dB	1.40:1	30W
TPD2040A16	16-way	2.0-4.0GHz	1.50dB	±0.50dB	±5°	20dB	1.40:1	30W
TPD4080A2	2-way	4.0-8.0GHz	0.50dB	±0.20dB	±2°	20dB	1.25:1	30W
TPD4080A3	3-way	4.0-8.0GHz	0.80dB	±0.30dB	±3°	18dB	1.40:1	30W
TPD4080A4	4-way	4.0-8.0GHz	0.90dB	±0.30dB	±3°	20dB	1.30:1	30W
TPD4080A6	6-way	4.0-8.0GHz	1.20dB	±0.50dB	±5°	18dB	1.40:1	30W
TPD4080A8	8-way	4.0-8.0GHz	1.20dB	±0.40dB	±4°	18dB	1.40:1	30W
TPD4080A12	12-way	4.0-8.0GHz	1.50dB	±0.50dB	±5°	18dB	1.50:1	30W
TPD4080A16	16-way	4.0-8.0GHz	1.50dB	±0.50dB	±5°	18dB	1.50:1	30W
TPD60180A2	2-way	6.0-18GHz	0.70dB	±0.30dB	±5°	18dB	1.40:1	30W
TPD60180A3	3-way	6.0-18GHz	1.00dB	±0.60dB	±6°	18dB	1.50:1	30W
TPD60180A4	4-way	6.0-18GHz	1.10dB	±0.50dB	±5°	18dB	1.50:1	30W
TPD60180A6	6-way	6.0-18GHz	2.00dB	±1.0dB	±10°	16dB	1.70:1	30W
TPD60180A8	8-way	6.0-18GHz	1.80dB	±0.50dB	±8°	16dB	1.60:1	30W
TPD60180A12	12-way	6.0-18GHz	2.20dB	±0.90dB	±10°	16dB	1.80:1	30W
TPD60180A16	16-way	6.0-18GHz	2.80dB	±0.80dB	±10°	16dB	1.70:1	30W
TPD80180A3	3-way	8.0-18GHz	0.80dB	±0.50dB	±6°	18dB	1.50:1	30W
TPD0624A16	16-way	0.6-2.4GHz	1.80dB	±0.50dB	±5°	22dB	1.50:1	30W
TPD0624A24	24-way	0.6-2.4GHz	2.00dB	±0.50dB	±7°	18dB	1.50:1	30W
TPD0825A2	2-way	0.8-2.5GHz	0.40dB	±0.20dB	±2°	22dB	1.20:1	30W

Broad Band Power Divider

the source of passive components

Part Number	No. of ways	Frequency Range	Insertion Loss	Amplitude Balance	Phase Balance	Isolation	VSWR	Power
TPD0825A3	3-way	0.8-2.5GHz	0.60dB	±0.30dB	±3°	22dB	1.20:1	30W
TPD0825A4	4-way	0.8-2.5GHz	0.70dB	±0.30dB	±3°	22dB	1.20:1	30W
TPD0825A8	8-way	0.8-2.5GHz	1.30dB	±0.30dB	±3°	22dB	1.50:1	30W
TPD0922A3	3-way	0.9-2.25GHz	0.60dB	±0.30dB	±3°	20dB	1.30:1	30W
TPD0922A5	5-way	0.9-2.25GHz	1.00dB	±0.50dB	±5°	20dB	1.40:1	30W
TPD0727A2	2-way	0.7-2.7GHz	0.50dB	±0.20dB	±2°	22dB	1.25:1	30W
TPD0727A3	3-way	0.7-2.7GHz	0.80dB	±0.30dB	±3°	20dB	1.30:1	30W
TPD0727A4	4-way	0.7-2.7GHz	0.90dB	±0.30dB	±3°	22dB	1.30:1	30W
TPD0727A6	6-way	0.7-2.7GHz	1.20dB	±0.30dB	±5°	20dB	1.30:1	30W
TPD0727A8	8-way	0.7-2.7GHz	1.40dB	±0.30dB	±3°	20dB	1.40:1	30W
TPD0727A16	16-way	0.7-2.7GHz	1.80dB	±0.50dB	±5°	20dB	1.40:1	30W
TPD0420A2	2-way	0.4-2.0GHz	0.60dB	±0.20dB	±2°	18dB	1.25:1	30W
TPD0420A4	4-way	0.4-2.0GHz	0.60dB	±0.20dB	±2°	18dB	1.30:1	30W
TPD0436A2	2-way	0.4-3.6GHz	0.60dB	±0.20dB	±2°	18dB	1.30:1	30W
TPD0436A4	4-way	0.4-3.6GHz	1.20dB	±0.30dB	±3°	16dB	1.30:1	30W
TPD0436A8	8-way	0.4-3.6GHz	2.40dB	±0.50dB	±5°	16dB	1.50:1	30W
TPD0520A2	2-way	0.5-2.0GHz	0.50dB	±0.20dB	±2°	22dB	1.20:1	30W
TPD0520A3	3-way	0.5-2.0GHz	0.70dB	±0.30dB	±3°	18dB	1.30:1	30W
TPD0520A4	4-way	0.5-2.0GHz	0.90dB	±0.30dB	±3°	22dB	1.25:1	30W
TPD0520A6	6-way	0.5-2.0GHz	1.10dB	±0.50dB	±5°	18dB	1.30:1	30W
TPD0520A8	8-way	0.5-2.0GHz	1.40dB	±0.30dB	±3°	22dB	1.30:1	30W
TPD0520A12	12-way	0.5-2.0GHz	1.40dB	±0.50dB	±5°	18dB	1.40:1	30W
TPD0520A16	61-way	0.5-2.0GHz	1.60dB	±0.50dB	±5°	20dB	1.40:1	30W
TPD0530A2	2-way	0.5-3.0GHz	0.70dB	±0.20dB	±2°	20dB	1.30:1	30W
TPD0530A4	4-way	0.5-3.0GHz	1.10dB	±0.30dB	±3°	20dB	1.40:1	30W
TPD0530A8	8-way	0.5-3.0GHz	2.00dB	±0.50dB	±5°	18dB	1.40:1	30W
TPD0540A2	2-way	0.5-4.0GHz	0.60dB	±0.20dB	±2°	20dB	1.30:1	30W
TPD0540A4	4-way	0.5-4.0GHz	1.20dB	±0.30dB	±3°	18dB	1.40:1	30W
TPD0540A8	8-way	0.5-4.0GHz	2.00dB	±0.50dB	±5°	18dB	1.50:1	30W
TPD0560A2	2-way	0.5-6.0GHz	0.70dB	±0.20dB	±2°	22dB	1.30:1	30W
TPD0560A3	3-way	0.5-6.0GHz	2.00dB	±0.60dB	±6°	18dB	1.60:1	30W

the source of passive components

Broad Band Power Divider

Part Number	No. of ways	Frequency Range	Insertion Loss	Amplitude Balance	Phase Balance	Isolation	VSWR	Power
TPD0560A4	4-way	0.5-6.0GHz	1.50dB	±0.30dB	±5°	17dB	1.40:1	30W
TPD0560A6	6-way	0.5-6.0GHz	2.80dB	±0.80dB	±8°	16dB	1.70:1	30W
TPD0560A8	8-way	0.5-6.0GHz	2.80dB	±0.50dB	±8°	16dB	1.60:1	30W
TPD071302	2-way	0.7-13GHz	1.90dB	±0.30dB	±3°	16dB	1.50:1	30W
TPD071304	4-way	0.7-13GHz	4.00dB	±0.50dB	±5°	14dB	1.60:1	30W
TPD0580A2	2-way	0.5-8.0GHz	1.20dB	±0.30dB	±3°	18dB	1.50:1	30W
TPD1040A2	2-way	1.0-4.0GHz	0.50dB	±0.20dB	±2°	20dB	1.25:1	30W
TPD1040A3	3-way	1.0-4.0GHz	0.70dB	±0.30dB	±3°	18dB	1.40:1	30W
TPD1040A4	4-way	1.0-4.0GHz	0.80dB	±0.30dB	±3°	20dB	1.30:1	30W
TPD1040A6	6-way	1.0-4.0GHz	1.20dB	±0.50dB	±5°	18dB	1.40:1	30W
TPD1040A8	8-way	1.0-4.0GHz	1.40dB	±0.40dB	±4°	20dB	1.40:1	30W
TPD1040A12	12-way	1.0-4.0GHz	1.50dB	±0.50dB	±5°	18dB	1.50:1	30W
TPD1040A16	16-way	1.0-4.0GHz	1.80dB	±0.50dB	±5°	20dB	1.50:1	30W
TPD2080A2	2-way	2.0-8.0GHz	0.60dB	±0.20dB	±2°	20dB	1.30:1	30W
TPD2080A3	3-way	2.0-8.0GHz	1.00dB	±0.50dB	±5°	20dB	1.40:1	30W
TPD2080A4	4-way	2.0-8.0GHz	1.10dB	±0.30dB	±3°	20dB	1.40:1	30W
TPD2080A6	6-way	2.0-8.0GHz	1.30dB	±0.50dB	±5°	19dB	1.50:1	30W
TPD2080A8	8-way	2.0-8.0GHz	1.80dB	±0.50dB	±5°	18dB	1.40:1	30W
TPD2080A12	12-way	2.0-8.0GHz	2.20dB	±0.60dB	±8°	18dB	1.60:1	30W
TPD2080A16	16-way	2.0-8.0GHz	2.60dB	±0.60dB	±8°	18dB	1.60:1	30W
TPD40180A2	2-way	4.0-18.0GHz	0.80dB	±0.40dB	±5°	18dB	1.50:1	30W
TPD40180A4	4-way	4.0-18.0GHz	1.60dB	±0.50dB	±8°	17dB	1.60:1	30W
TPD40180A8	8-way	4.0-18.0GHz	2.50dB	±0.60dB	±10°	15dB	1.80:1	30W
TPD1080A2	2-way	1.0-8.0GHz	0.80dB	±0.20dB	±2°	20dB	1.30:1	30W
TPD1080A4	4-way	1.0-8.0GHz	1.60dB	±0.30dB	±3°	20dB	1.40:1	30W
TPD1080A8	8-way	1.0-8.0GHz	1.60dB	±0.30dB	±3°	20dB	1.40:1	30W
TPD1080A16	16-way	1.0-8.0GHz	1.60dB	±0.30dB	±3°	20dB	1.40:1	30W
TPD10124A2	2-way	1.0-12.4GHz	1.20dB	±0.30dB	±3°	18dB	1.40:1	30W
TPD10124A4	4-way	1.0-12.4GHz	1.80dB	±0.50dB	±5°	16dB	1.60:1	30W
TPD10180A2	2-way	1.0-18GHz	1.50dB	±0.50dB	±5°	16dB	1.50:1	30W
TPD10180A4	4-way	1.0-18GHz	2.90dB	±0.80dB	±8°	14dB	1.70:1	30W

Broad Band Power Divider

the source of passive components

Part Number	No. of ways	Frequency Range	Insertion Loss	Amplitude Balance	Phase Balance	Isolation	VSWR	Power
TPD10180A8	8-way	1.0-18GHz	4.50dB	±1.00dB	±10°	13dB	2.00:1	30W
TPD2437A10	10-way	2.4-3.7GHz	1.2dB	±0.60dB	±6°	18dB	1:40:1	30W
TPD3442A64	64-way	3.4-4.2GHz	2.5dB	±0.80dB	±10°	20dB	1:50:1	30W
TPD3135A2	2-way	3.1-3.5GHz	0.30dB	±0.10dB	±2°	23dB	1.30:1	30W
TPD3135A4	4-way	3.1-3.5GHz	0.45dB	±0.10dB	±2°	23dB	1.30:1	30W
TPD3135A8	8-way	3.1-3.5GHz	0.60dB	±0.20dB	±2°	23dB	1.30:1	30W
TPD3135A16	16-way	3.1-3.5GHz	0.60dB	±0.20dB	±2°	23dB	1.30:1	30W
TPD3135A32	32-way	3.1-3.5GHz	1.60dB	±0.60dB	±5°	20dB	1.50:1	30W
TPD70124A2	2-way	7-12.4 GHz	0.50dB	±0.30dB	±3°	20dB	1.40:1	30W
TPD70124A3	3-way	7-12.4 GHz	0.60dB	±0.50dB	±5°	20dB	1.50:1	30W
TPD70124A4	4-way	7-12.4 GHz	0.90dB	±0.30dB	±5°	20dB	1.50:1	30W
TPD70124A8	8-way	7-12.4 GHz	1.20dB	±0.50dB	±5°	20dB	1.50:1	30W
TPD900970A2	2-way	9.0-9.7 GHz	0.50dB	±0.20dB	±2°	20dB	1.30:1	30W
TPD900970A4	4-way	9.0-9.7 GHz	0.70dB	±0.30dB	±3°	20dB	1.40:1	30W
TPD900970A8	8-way	9.0-9.7 GHz	1.20dB	±0.50dB	±5°	20dB	1.40:1	30W
TPD900970A16	16-way	9.0-9.7 GHz	1.50dB	±0.50dB	±5°	20dB	1.40:1	30W
TPD100150A2	2-way	10-15GHz	0.60dB	±0.30dB	±3°	20dB	1.30:1	30W
TPD100150A4	4-way	10-15GHz	0.90dB	±0.30dB	±3°	20dB	1.40:1	30W
TPD100150A8	8-way	10-15GHz	1.60dB	±0.50dB	±5°	20dB	1.50:1	30W
TPD120180A2	2-way	12-18GHz	0.80dB	±0.40dB	±5°	20dB	1:45:1	30W
TPD180183A3	3-way	18.0-18.3GHz	1.00dB	±0.50dB	±6°	18dB	1.50:1	30W
TPD0760A2	2-way	0.7-6.0GHz	0.80dB	±0.30dB	±3°	18dB	1.40:1	30W
TPD0760A3	3-way	0.7-6.0GHz	1.00dB	±0.50dB	±5°	20dB	1.40:1	30W
TPD0760A4	4-way	0.7-6.0GHz	1.50dB	±0.50dB	±5°	16dB	1.50:1	30W
TPD0760A6	6-way	0.7-6.0GHz	1.70dB	±0.50dB	±6°	18dB	1.50:1	30W
TPD0760A8	8-way	0.7-6.0GHz	1.80dB	±0.40dB	±6°	18dB	1.50:1	30W
TPD0760A12	12-way	0.7-6.0GHz	2.80dB	±0.80dB	±12°	16dB	1.70:1	30W
TPD0760A16	16-way	0.7-6.0GHz	2.80dB	±0.80dB	±10°	16dB	1.60:1	30W
TPD0760A32	32-way	0.7-6.0GHz	3.00dB	±0.80dB	±15°	16dB	1.60:1	30W
TPD0505A32	32-way	5.1-5.7GHz	1.60dB	±0.60dB	±5°	20dB	1.50:1	30W
TPD2529A32	32-way	2.5-2.9GHz	1.60dB	±0.60dB	±5°	20dB	1.50:1	30W

Part Number	Nominal Split	Frequency Range	Insertion Loss	Amplitude Balance	Phase Balance	Isolation	VSWR	Power
THC20400A	3.01dB	2-40GHz	2.9dB	±1.4dB	±14°	10dB	1.80:1	20W
THC100400A	3.01dB	10-40GHz	2.8dB	±1.0dB	±10°	10dB	1.80:1	20W
THC20265A	3.01dB	2-26.5GHz	1.7dB	±0.8dB	±10°	16dB	1.50:1	20W
THC20180A	3.01dB	2-18GHz	1.2dB	±0.5dB	±5°	20dB	1.40:1	50W
THC10180A	3.01dB	1-18GHz	1.7dB	±0.8dB	±8°	15dB	1.60:1	50W
THC10124A	3.01dB	1-12.4GHz	1.0dB	±0.6dB	±5°	20dB	1.30:1	50W
THC0560A	3.01dB	0.5-6GHz	1.1dB	±0.6dB	±5°	20dB	1.25:1	50W
THC0590A	3.01dB	0.5-9GHz	1.5dB	±0.7dB	±7°	16dB	1.40:1	50W
THC07124A	3.01dB	0.7-12.4GHz	1.8dB	±0.7dB	±7°	16dB	1.40:1	50W
THC0104A	3.01dB	0.1-0.45GHz	0.5dB	±0.60dB	±2°	25dB	1.20:1	50W
THC0310A	3.01dB	0.3-1.0GHz	0.7dB	±0.60dB	±2°	25dB	1.20:1	50W
THC0409A	3.01dB	0.45-0.9GHz	0.3dB	±0.50dB	±2°	22dB	1.20:1	50W
THC0510A	3.01dB	0.5-1GHz	0.3dB	±0.50dB	±2°	22dB	1.20:1	50W
THC0715A	3.01dB	0.75-1.5GHz	0.3dB	±0.50dB	±2°	22dB	1.20:1	50W
THC1020A	3.01dB	1-2GHz	0.3dB	±0.50dB	±2°	22dB	1.20:1	50W
THC2040A	3.01dB	2-4GHz	0.35dB	±0.50dB	±3°	22dB	1.20:1	50W
THC4080A	3.01dB	4-8GHz	0.5dB	±0.50dB	±3°	20dB	1.25:1	50W
THC40180A	3.01dB	4-18GHz	1.2dB	±0.50dB	±5°	20dB	1.40:1	50W
THC0315A	3.01dB	0.3-1.5GHz	0.9dB	±0.60dB	±3°	20dB	1.20:1	50W
THC0727A	3.01dB	0.7-2.7GHz	0.5dB	±0.50dB	±3°	20dB	1.20:1	50W
THC0825A	3.01dB	0.8-2.5GHz	0.5dB	±0.40dB	±3°	20dB	1.20:1	50W
THC0520A	3.01dB	0.5-2.0GHz	0.6dB	±0.50dB	±3°	20dB	1.20:1	50W
THC0525A	3.01dB	0.5-3.0GHz	0.6dB	±0.50dB	±3°	20dB	1.20:1	100W
THC0540A	3.01dB	0.5-4.0GHz	0.8dB	±0.50dB	±3°	20dB	1.20:1	50W
THC1040A	3.01dB	1-4GHz	0.6dB	±0.50dB	±5°	20dB	1.25:1	50W
THC2080A	3.01dB	2-8GHz	0.7dB	±0.60dB	±5°	20dB	1.30:1	50W

Part Number	Nominal Split	Frequency Range	Insertion Loss	Amplitude Balance	Phase Balance	Isolation	VSWR	Power
THC0409B	3.01dB	0.45-0.9GHz	0.4dB	±0.50dB	±5°	22dB	1.25:1	20W
THC0510B	3.01dB	0.5-1GHz	0.4dB	±0.50dB	±5°	22dB	1.25:1	20W
THC1214B	3.01dB	1.2-1.4GHz	0.3dB	±0.30dB	±3°	22dB	1.20:1	20W
THC0715B	3.01dB	0.75-1.5GHz	0.4dB	±0.50dB	±5°	22dB	1.25:1	20W
THC1020B	3.01dB	1-2GHz	0.4dB	±0.50dB	±5°	22dB	1.25:1	20W
THC2224B	3.01dB	2.2-2.4GHz	0.3dB	±0.30dB	±3°	25dB	1.25:1	20W
THC2040B	3.01dB	2-4GHz	0.5dB	±0.50dB	±5°	22dB	1.25:1	20W
THC4080B	3.01dB	4-8GHz	0.6dB	±0.50dB	±5°	18dB	1.30:1	20W
THC60120B	3.01dB	6-12GHz	1.0dB	±0.50dB	±5°	18dB	1.40:1	20W
THC20180B	3.01dB	2-18GHz	2.8dB	±0.80dB	±14°	18dB	1.60:1	20W

Environmental Parameters:

Shock: 20G’s , 1/2Sine, 11Ms

Vibration: 10G’s, 10Hz—2000Hz

Operation Temperature:-55℃to +85℃

Storage Temperature:-60℃to +90℃

Relatively Humidity:0 to 95%

Return Loss VS VSWR Table

Return Loss (dB)	Reflective Coefficient (Rho)	V.S.W.R.	Mismatching Loss (dB)	Return Loss (dB)	Reflective Coefficient (Rho)	V.S.W.R.	Mismatching Loss (dB)
∞	0.0000	1.00	0.00	16.00	0.1585	1.38	0.11
50.00	0.0032	1.01	0.00	15.50	0.1679	1.40	0.12
49.00	0.0035	1.01	0.00	15.00	0.1778	1.43	0.14
48.00	0.0040	1.01	0.00	14.50	0.1884	1.46	0.16
47.00	0.0045	1.01	0.00	14.00	0.1995	1.50	0.18
46.00	0.0050	1.01	0.00	13.50	0.2113	1.54	0.20
45.00	0.0056	1.01	0.00	13.00	0.2239	1.58	0.22
44.00	0.0063	1.01	0.00	12.50	0.2371	1.62	0.25
43.00	0.0071	1.01	0.00	12.00	0.2512	1.67	0.28
42.00	0.0079	1.02	0.00	11.50	0.2661	1.73	0.32
41.00	0.0089	1.02	0.00	11.00	0.2818	1.78	0.36
40.00	0.0100	1.02	0.00	10.50	0.2985	1.85	0.41
39.00	0.0112	1.02	0.00	10.00	0.3162	1.92	0.46
38.00	0.0126	1.03	0.00	9.60	0.3311	1.99	0.50
37.00	0.0141	1.03	0.00	9.20	0.3467	2.06	0.56
36.00	0.0158	1.03	0.00	8.80	0.3631	2.14	0.61
35.00	0.0178	1.04	0.00	8.40	0.3802	2.23	0.68
34.00	0.0200	1.04	0.00	8.00	0.3981	2.32	0.75
33.00	0.0224	1.05	0.00	7.60	0.4169	2.43	0.83
32.00	0.0251	1.05	0.00	7.20	0.4365	2.55	0.92
31.00	0.0282	1.06	0.00	6.80	0.4571	2.68	1.02
30.00	0.0316	1.07	0.00	6.40	0.4786	2.84	1.13
29.00	0.0355	1.07	0.01	6.00	0.5012	3.01	1.26
28.00	0.0398	1.08	0.01	5.60	0.5248	3.21	1.40
27.00	0.0447	1.09	0.01	5.20	0.5495	3.44	1.56
26.00	0.0501	1.11	0.01	4.80	0.5754	3.71	1.75
25.00	0.0562	1.12	0.01	4.40	0.6026	4.03	1.96
24.00	0.0631	1.13	0.02	4.00	0.6310	4.42	2.20
23.00	0.0708	1.15	0.02	3.60	0.6607	4.89	2.49
22.00	0.0794	1.17	0.03	3.20	0.6918	5.49	2.83
21.00	0.0891	1.20	0.03	2.80	0.7244	6.26	3.23
20.00	0.1000	1.22	0.04	2.40	0.7586	7.28	3.72
19.50	0.1059	1.24	0.05	2.00	0.7943	8.72	4.33
19.00	0.1122	1.25	0.06	1.60	0.8318	10.89	5.11
18.50	0.1189	1.27	0.06	1.20	0.8710	14.50	6.17
18.00	0.1259	1.29	0.07	0.80	0.9120	21.73	7.74
17.50	0.1334	1.31	0.08	0.40	0.9550	43.44	10.56
17.00	0.1413	1.33	0.09	0.20	0.9772	86.86	13.47
16.50	0.1496	1.35	0.10	0.00	1.0000	∞	∞

Notes:

1. Return Loss= -20*log(|Rho|)
2. Mismatching Loss = -10*log(1-|Rho|^2)
3. V.S.W.R. = (1+|Rho|)/(1-|Rho|)