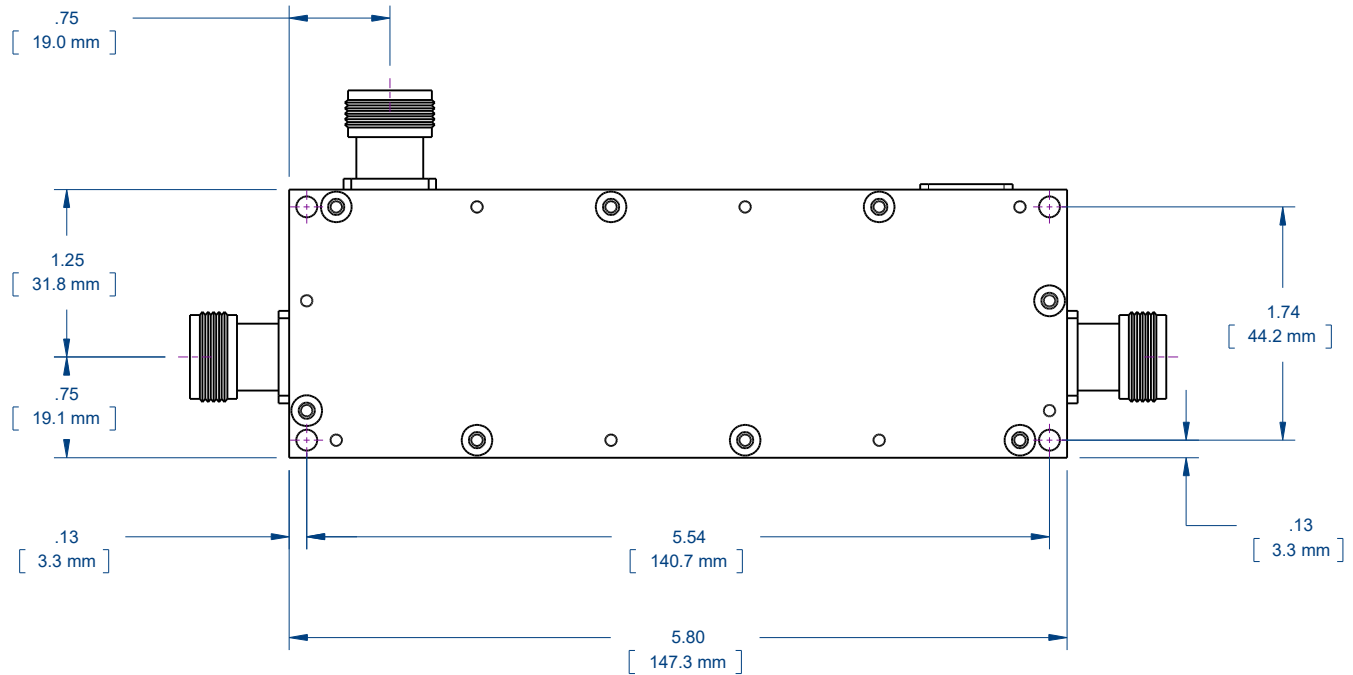
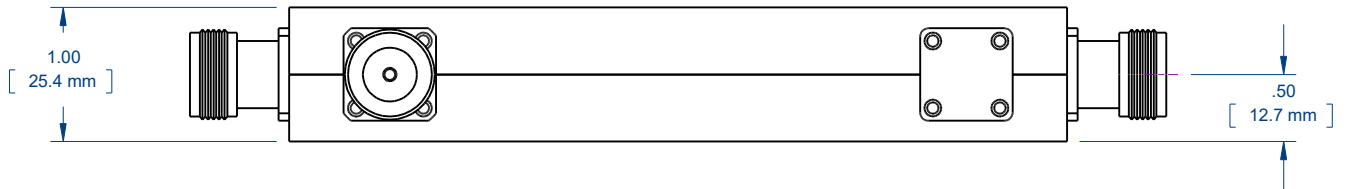




VHF-UHF Directional Coupler

Stripline, 130-520MHz, N or SMA-Female

RoHS
Compliant



Specification tables on following page.

Insertion loss includes loss due to splitting/coupling.

Operating Environment:
 Indoor use only.
 Relative Humidity less than 90%, non-condensing.
 Weatherproofing and paint options available.
 Power rating for load VSWR 1.20:1 max.

UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN INCHES
 [mm] SHOWN FOR CONVENIENCE
 TOLERANCES ON:
 2 PL DECIMALS: ± .03
 3 PL DECIMALS: ± .015
 ANGLES: ± 1°

Housing Material: Aluminum Alloy 6061
 Housing Finish: RoHS Clear Chem Film
 Connectors Material:
 Body: Brass, Tri-plate
 Insulators: PTFE
 Contact: BeCu, Silver Plate
 Solder Alloys Used:
 Sn 96.5, Ag 3.0, Cu 0.5 (Standard)
 Sn 42, Bi 57.6, Ag 0.4 (Low-Temperature)

REV	DESCRIPTION	DATE	APPROVED
0	Re-designed. Replaces 1CN1352-XX and WMDCXX-0.13-0.52-X; PCN-1006.	1-1-2018	ETW

Specifications subject to change without notice.
 This document shall not form part of a contract.

SIZE A	CAGE CODE 78YZ0	DRWG NO. SPEC-WMDCXX-130-520M-X	REV. 0
SCALE 1 : N/A		SHEET	



Made in U.S.A.

VHF-UHF Directional Coupler

Stripline, 130-520MHz, N or SMA-Female

RoHS
Compliant

TABLE 1 - General specifications.

Specification	Value	Unit	Notes
Frequency Range	130 to 520	MHz	Useable from 80-MHz with approx. 3-dB roll-down.
Coupling Mean Value	See table 2	dB, nom	As obtained from VNA max/min marker values.
Coupling Tolerance	See table 2	dB, max	Upper/lower limit of mean value.
Coupling Flatness	See table 2	dB, max	As obtained from VNA max/min marker values.
Directionality	20	dB, min	
Insertion Loss	See table 2	dB, max	Includes loss to coupling factor.
Forward Power	See table 2	W, max	Main line input/output power into load VSWR 1.20:1 max.
Reverse Power	See table 2	W, max	Main line input/output power into load VSWR 1.20:1 max.
Main Line VSWR	1.25	:1, max	
Coupled Port VSWR	1.25	:1, max	
Operating Temperature	-55 to +85	C	Design to meet, tested at 25 C.

TABLE 2 - Model-specific specifications.

Part Number	Coupling dB, nom.	Coupling Tolerance	Coupling Flatness	Power W, max.	Insertion Loss dB, max.
WMDC03-130-520M-X	3	± 1.00	± 0.7	35	4.0
WMDC05-130-520M-X	5			45	2.2
WMDC06-130-520M-X	6			60	1.8
WMDC07-130-520M-X	7			75	1.7
WMDC08-130-520M-X	8			80	1.5
WMDC10-130-520M-X	10			100	0.9
WMDC15-130-520M-X	15	± 1.25	± 1.0	150	0.4
WMDC20-130-520M-X	20	± 1.50			0.3
WMDC30-130-520M-X	30				0.3

Insertion loss includes loss due to splitting/coupling.

Operating Environment:

Indoor use only.
 Relative Humidity less than 90%, non-condensing.
 Weatherproofing and paint options available.
 Power rating for load VSWR 1.20:1 max.

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
 [mm] SHOWN FOR CONVENIENCE
 TOLERANCES ON:
 2 PL DECIMALS: ± .03
 3 PL DECIMALS: ± .015
 ANGLES: ± 1°

Housing Material: Aluminum Alloy 6061

Housing Finish: RoHS Clear Chem Film

Connectors Material:

Body: Brass, Tri-plate
 Insulators: PTFE
 Contact: BeCu, Silver Plate

Solder Alloys Used:

Sn 96.5, Ag 3.0, Cu 0.5 (Standard)
 Sn 42, Bi 57.6, Ag 0.4 (Low-Temperature)



Made in U.S.A.

VHF-UHF Directional Coupler

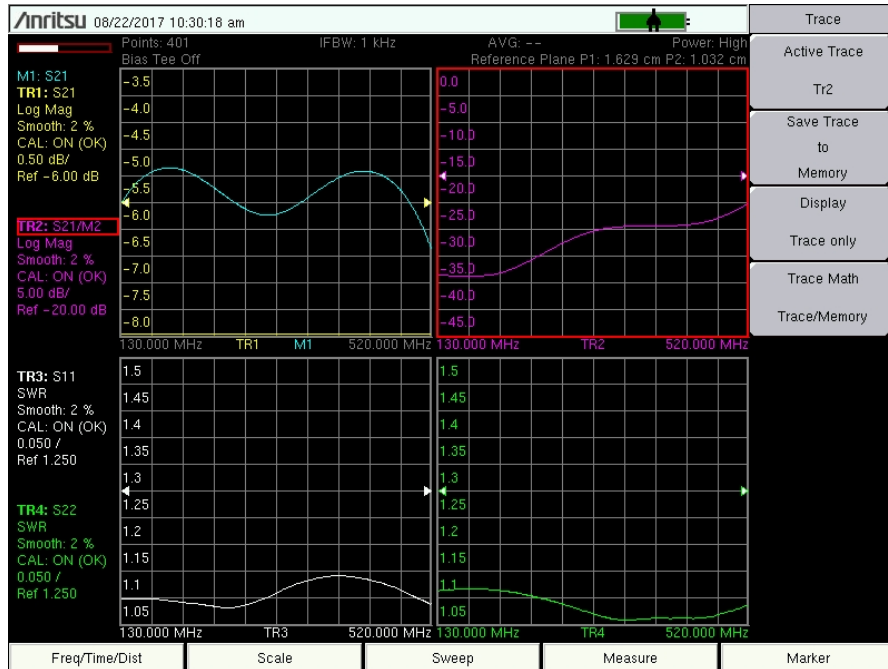
Stripline, 130-520MHz, N or SMA-Female

RoHS
Compliant

-= Typical Performance Data =-

Example shown. Actual unit-to-unit performance may vary.

Coupling

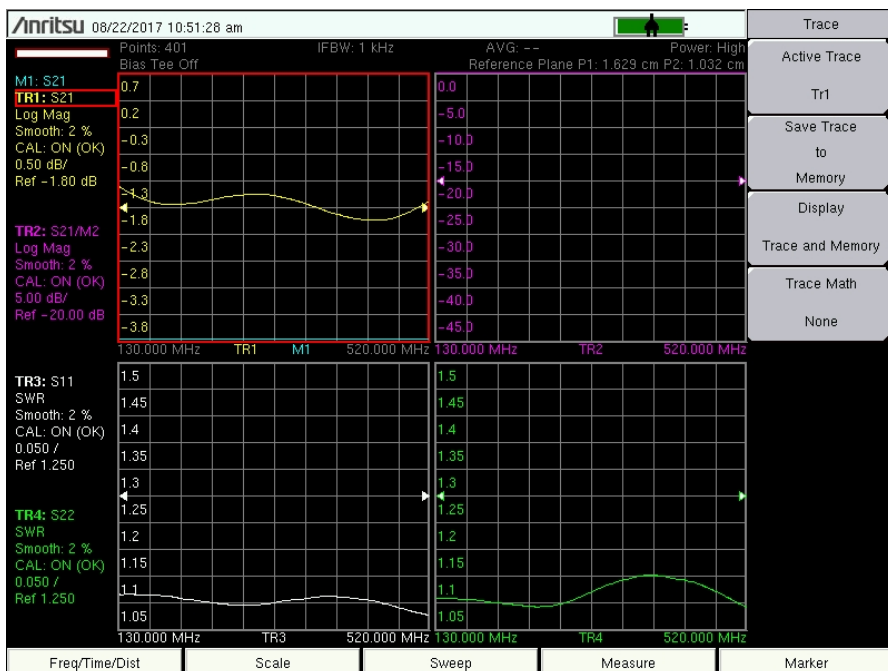


Directionality

Input VSWR

Coupled Port VSWR

Insertion Loss



(No Data)

Input VSWR

Output VSWR