


PRODUCT DATA SHEET
C10049

4-Port Dual Directional Coupler employs two, 3-Port Uni-Directional Couplers, internally connected, in tandem, providing measurement of both forward and reverse power. Ideal for simultaneously monitoring a system's forward and reverse power and for reflectometer measurements. Unlike the Bi-Directional Coupler, the directivity of the Dual Directional Coupler is unaffected by the loads on the coupled ports.

Features:

High Power Wide Bandwidths Small Size Flat Coupling Custom Designs Available

Electrical Specifications:

Frequency: 1 - 11 MHz
 Power: 5000 W CW
 Coupling: 70 ± 1.0 dB Max.
 Insertion Loss: 0.05 dB Max.
 Flatness: ± 0.75 dB Max.
 VSWR (ML): 1.10:1 Max.
 Directivity: 20 dB Min.

Mechanical Specifications:

Type: Connectorized
 Material: Aluminum 6061-T6
 Surface Finish: Chem. Film Per MIL-DTL-5541F
 Type I Class 3 (Yellow Iridite)
 RoHS Compliant Available
 Operating Temperature: -55°C to +75°C
 Storage Temperature: -60°C to +85°C
 Humidity: 95% Non-Condensing
 Size: 6.0 x 3.0 x 2.24"

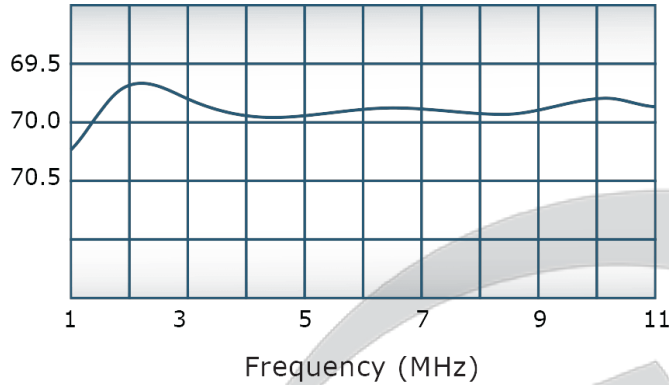
Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C10049-20	7/16 Female	7/16 Female	N Female	N Female
C10049-22	7/16 Female	7/16 Female	SMA	SMA
C10049-23	7/16 Female	7/16 Female	BNC	BNC
C10049-30	LC Female	LC Female	N Female	N Female
C10049-33	LC Female	LC Female	BNC	BNC

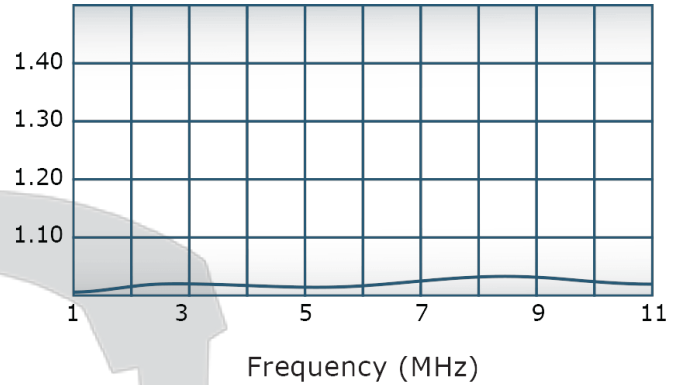
Werlatone® Broadband Dual, Uni, and Bi Directional RF Couplers are designed to tolerate the most stringent operating conditions associated with military and EMC testing environments. Many of our RF Directional Couplers, designated Mismatch Tolerant®, will operate continuously, at rated power, into a severe load mismatch condition. Our multi-octave Directional Couplers maintain exceptional coupling flatness, directivity, VSWR, and insertion loss.


Performance Data (Specifications subject to change without notice):

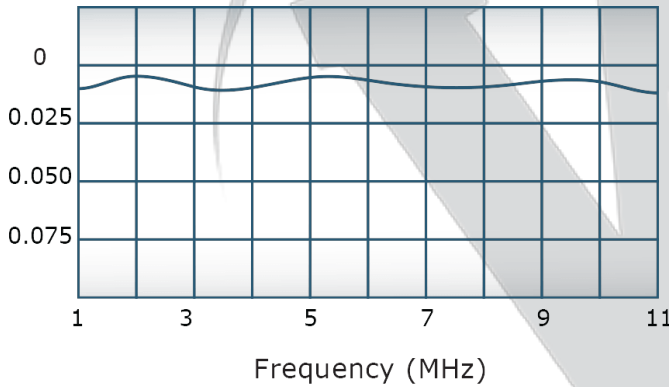
Coupling:



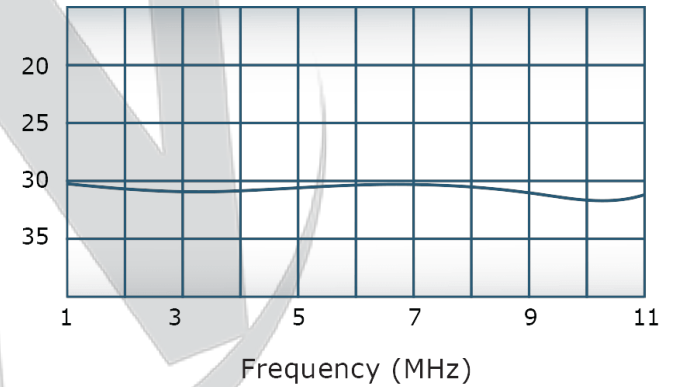
VSWR:



Insertion Loss:

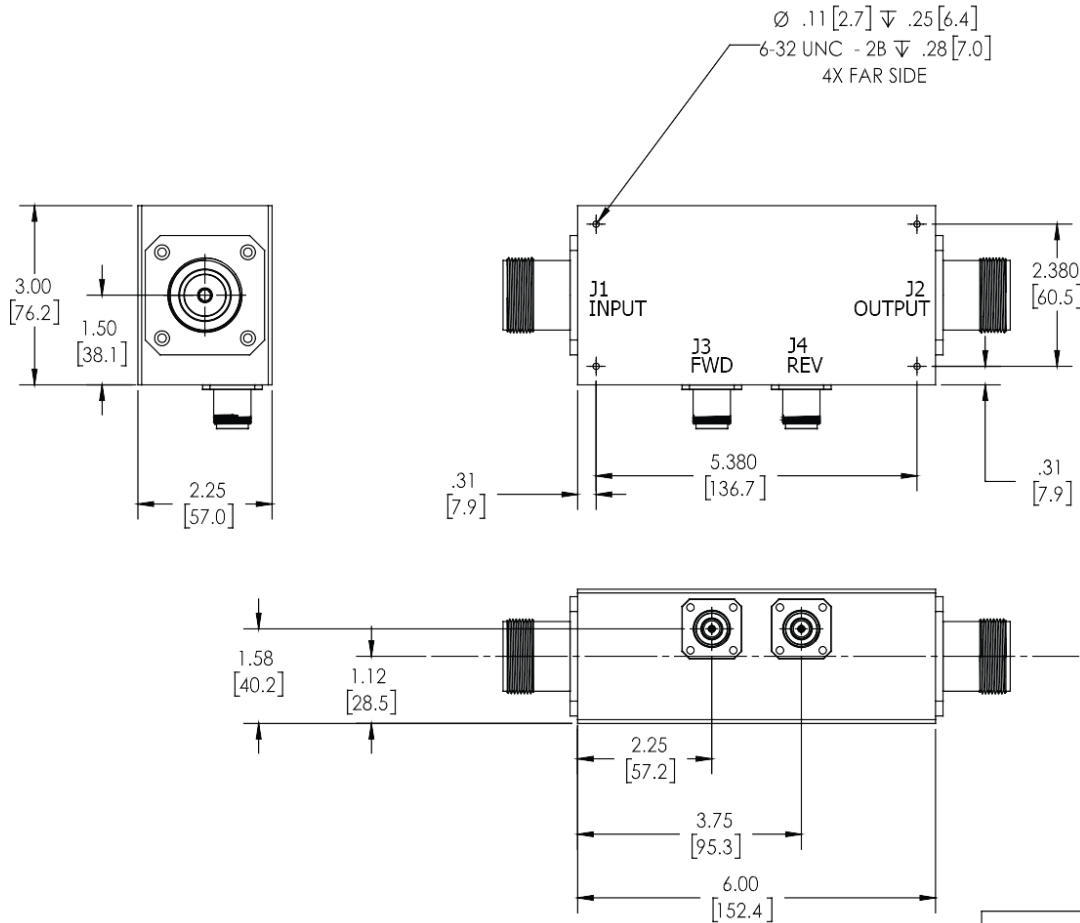


Directivity:



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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
-	INITIAL RELEASE	10/29/2018	CS



UNLESS OTHERWISE SPECIFIED	OWN	DATE	PLP	10/25/2018	17 Jon Barrett Rd Patterson, NY 12563
• INTERPRET DRAWING JAW MIL-STD-100	CHK	DATE	CS	10/29/2018	TITLE
• DIMENSIONING PER ASME Y14.3M-2009	ENGR	DATE	B	28812	10396-500
• PRESENT THE TOTAL DIMS FOR REF ONLY	MFRGR	DATE	SCALE	1:2	SHEET 1 OF 1
• DIMENSIONS ARE IN INCHES (mm)	QA	DATE	SIZE	CASE CODE	DWG NO
• DIMENSIONAL UNITS APPLY BEFORE PROCESSES	RLSE	DATE	REV	-	
• TOLERANCES:					
ANGLES: ± 2°					
2 PL ± .005 (1.3)					
2 PL ± .015 (4)					
• REMOVE ALL BURS AND SHARP EDGES R.02 MAX					
• CONCENTRICITY MACHINED DIA: .002 FIM					
• MACHINE TOOL REPAIR/CH: .003 MAX					
NEXT ASSY	USED ON	APPLICATION	THIRD ANGLE PROJECTION		

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 Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com