



PRODUCT DATA SHEET

C10747

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: 500 - 2500 MHz
Power: 500 W CW
Coupling: 60 ± 1.0 dB Max.
Insertion Loss: 0.2 dB Max.
Flatness: ± 1.0 dB Max.
VSWR (ML): 1.35:1 Max.
Directivity: 15 dB Min.

Mechanical Specifications:

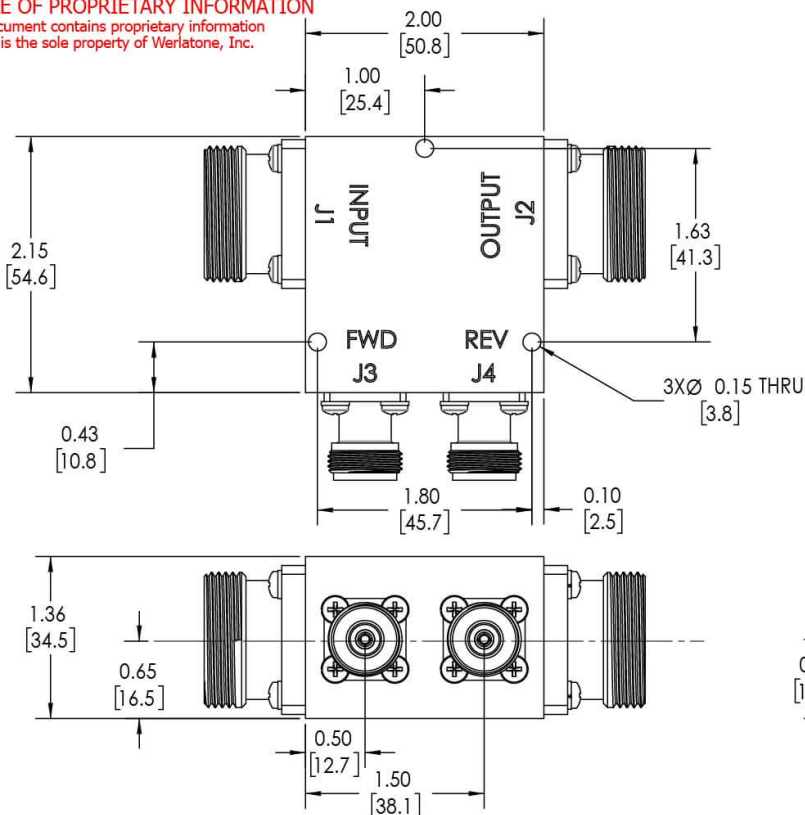
Type: Connectorized
Material: Aluminum 6061-T6
Surface Finish: Chem. Film Per MIL-DTL-5541F
Type I Class 3 (Yellow Iridite)
RoHS Compliant Available
Operating Temperature: -55°C to +75°C
Storage Temperature: -60°C to +85°C
Humidity: 95% Non-Condensing
Size: 2.15 x 2.0 x 1.36"

Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C10747-20	7/16 Female	7/16 Female	N Female	N Female
C10747-22	7/16 Female	7/16 Female	SMA	SMA
C10747-727	7/16 Male	7/16 Female	N Female	N Female

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.

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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
-	INITIAL-RELEASE	5/8/2015	BW
A	ECN 9696	3/25/19	RB

- NOTES: UNLESS OTHERWISE SPECIFIED**
- MATERIAL: ALUMINUM 6061-T6**
 - FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)**
 - CONNECTORS:**
J1,J2: 7/16 FEMALE
J3,J4: N FEMALE

UNLESS OTHERWISE SPECIFIED		SD	DATE	17 Jon Barrett Rd Patterson, NY 12563	
INTERPRET DRAWING IAW MIL-STD-100		CHK	DATE	 WERLATONE SINCE 1965	
DIMENSIONS FOR ASME Y14.5M-2009		CS	DATE		
PARENTHESES FOR REF ONLY		ENGR	DATE	OUTLINE	
DIMENSIONS ARE IN INCHES		INFR	DATE		
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		QA	DATE	SIZE CAGE CODE DWG NO B 21316-500	
TOLERANCES:		RLSE	DATE		
ANGLES ± 2° 3 PL ± .005 [13] 2 PL ± .015 [38] REMOVE ALL BURRS AND SHARP EDGES R.01 MAX CONCENTRICITY MACHINED DIA. .002 FIM MACHINE TOOL MISMATCH .003 MAX		THIRD ANGLE PROJECTION		SCALE 1:1	
NEXT ASSY USED ON		APPLICATION		SHEET 1 OF 1	

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