
PRODUCT DATA SHEET
C8686

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: 20-1000 MHz
 Power: 500 W CW
 Coupling: 40 ± 1.0 dB Max.
 Insertion Loss: 0.35 dB Max.
 Flatness: ± 0.5 dB Max.
 VSWR (ML): 1.25:1 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: 5.2 x 2.68 x 1.69"

Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C8686-10	N Female	N Female	N Female	N Female
C8686-12	N Female	N Female	SMA	SMA
C8686-13	N Female	N Female	BNC	BNC
C8686-712	N Male	N Female	SMA	SMA
C8686-714	N Male	N 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.

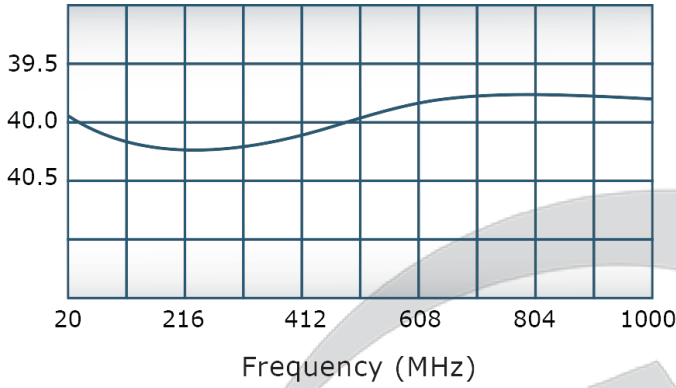


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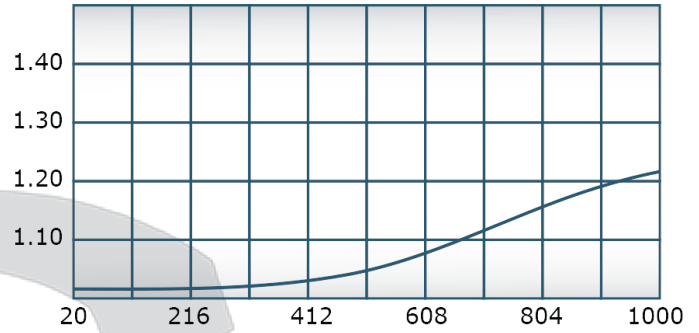
C8686

Performance Data (Specifications subject to change without notice):

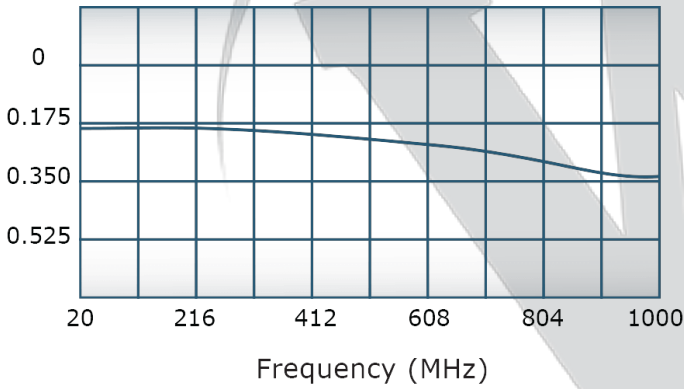
Coupling:



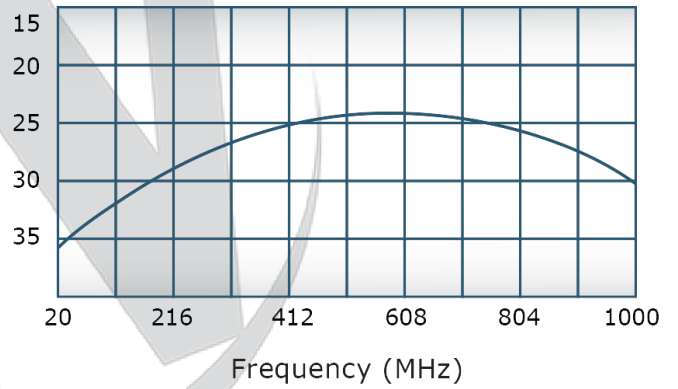
VSWR:



Insertion Loss:



Directivity:



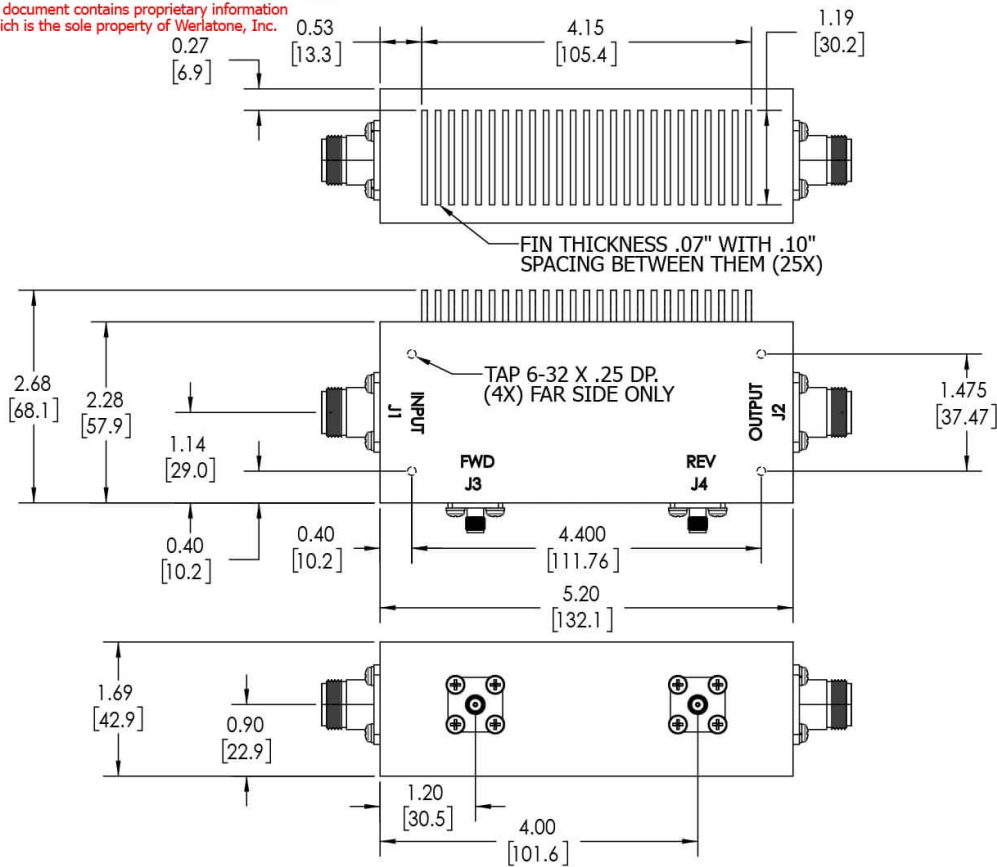
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Werlatone, Inc.

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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	11/28/18	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: N FEMALE
J3, J4: SMA FEMALE

UNLESS OTHERWISE SPECIFIED		DWN	DATE	WERLATONE SINCE 1965	17 Jon Barrett Rd Patterson, NY 12563
INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100 DIMENSIONS PER ASME Y14.5M-2009 PARENTHEetical INFO FOR REF ONLY DIMENSIONS ARE IN INCHES DIMENSIONAL LINES APPLY BEFORE PROCESSES		SD	2/11/2019		
TOLERANCES: 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.		CHK	DATE	TITLE	
		ENGR	2/11/2019	OUTLINE	
		BW	5/28/2008	SIZE	CAGE CODE
		INFR	DATE	B	10407-502
		QA	DATE	DWG NO	REV
		RLSE	DATE	1:1.5	A
NEXT ASSY	USED ON	THIRD ANGLE PROJECTION		SCALE	SHEET 1 OF 1
APPLICATION					

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