



PRODUCT DATA SHEET C1979

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:

 $\begin{array}{lll} \mbox{Frequency:} & .01 - 100 \mbox{ MHz} \\ \mbox{Power:} & 10,000 \mbox{ W CW} \\ \mbox{Coupling:} & 60 \pm 1.0 \mbox{ dB Max.} \\ \mbox{Insertion Loss:} & 0.1 \mbox{ dB Max.} \\ \mbox{Flatness:} & \pm 1.0 \mbox{ dB Max.} \\ \mbox{VSWR (ML):} & 1.30:1 \mbox{ Max.} \\ \mbox{Directivity:} & 20 \mbox{ dB Min.} \end{array}$

Mechanical Specifications:

Type: Connectorized 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: 12.0 x 6.0 x 4.5"

Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C1979-30	LC Female	LC Female	N Female	N Female
C1979-32	LC Female	LC Female	SMA	SMA
C1979-33	LC Female	LC Female	BNC	BNC
C1979-81	1 5/8" EIA	1 5/8" EIA	N Female	N Female
C1979-83	1 5/8" EIA	1 5/8" EIA	SMA	SMA
C1979-84	1 5/8" EIA	1 5/8" EIA	BNC	BNC
C1979-501	SQS Female	SQS Female	N Female	N Female
C1979-503	SQS Female	SQS 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.

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Performance Data (Specifications subject to change without notice):

Coupling: VSWR:

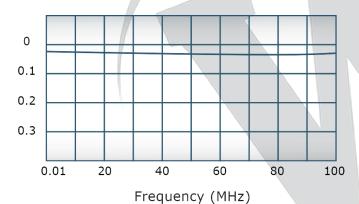
59.5
60.0
60.5
1.40
1.30
1.20
1.10

1.40 1.30 1.20 1.10 0.01 20 40 60 80 100

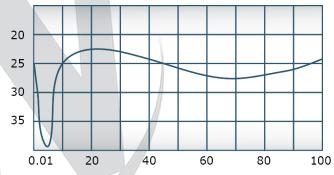
Frequency (MHz)

Frequency (MHz)

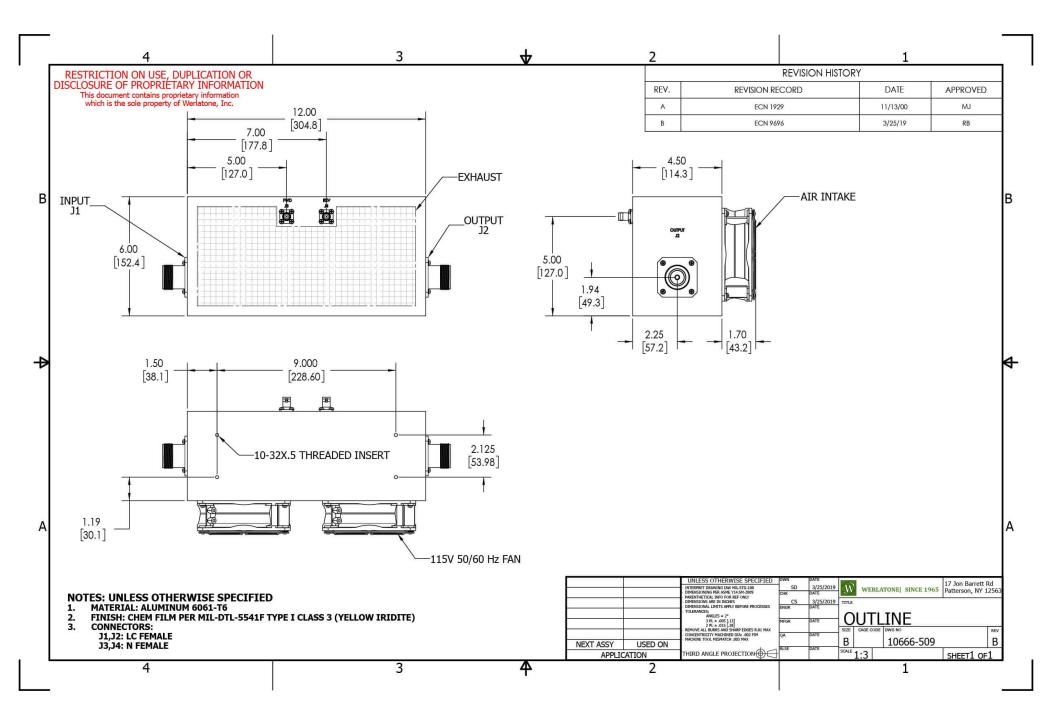
Insertion Loss:



Directivity:



Frequency (MHz)



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