


**PRODUCT DATA SHEET**
**C8644**

**4-Port Bi-Directional Coupler:** Similar to the 3-Port Uni-Directional Coupler, except that both ends of the coupled line serve as coupled ports. Convenient for simultaneously monitoring both forward and reverse power. The directivity of this coupler design is, however, dependent upon well matched 50 Ohm loads on the coupled ports.

**Features:**

High Power      Wide Bandwidths      Small Size      Flat Coupling      Custom Designs Available

**Electrical Specifications:**

Frequency:            1800 - 6100 MHz  
 Power:                60 W CW  
 Coupling:             20 ± 1.0 dB Max.  
 Insertion Loss:       0.4 dB Max.  
 Flatness:             ± 1.0 dB Max.  
 VSWR (ML):         1.25:1 Max.  
 Directivity:           18 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:                    1.10 x 0.75 x 0.48"  
 Weight:                 0.9 ounces / 26 grams

**Connector Configurations:**

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C8644-102	SMA	SMA	SMA	SMA

**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.

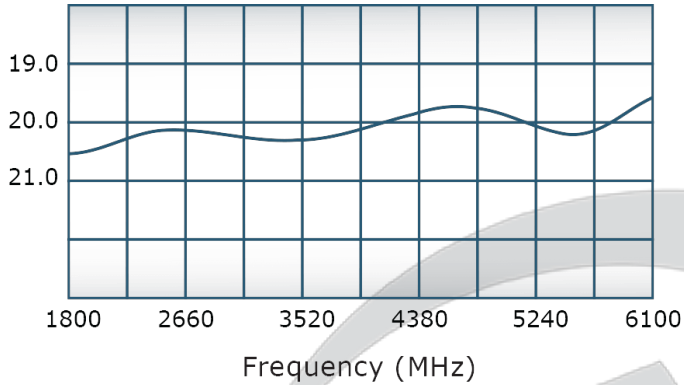


## PRODUCT DATA SHEET

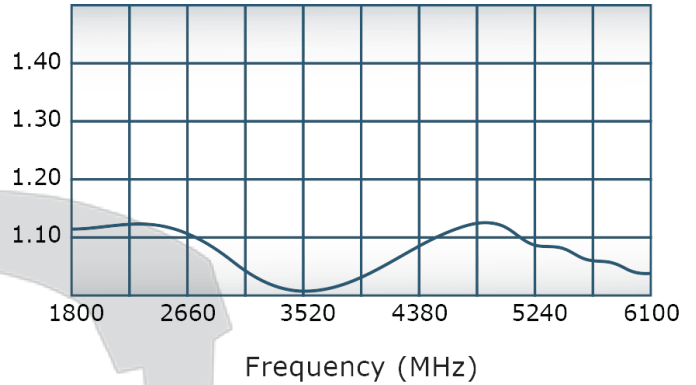
C8644

### Performance Data (Specifications subject to change without notice):

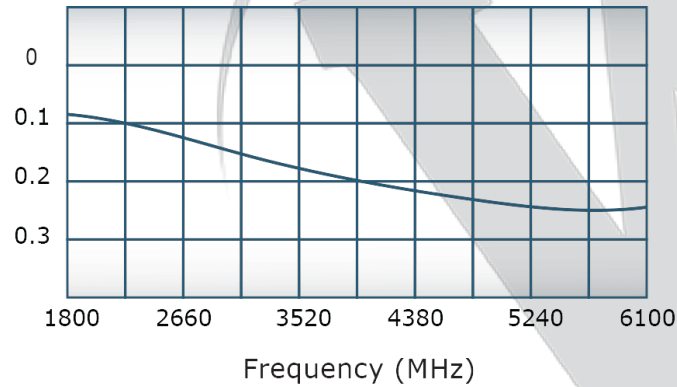
Coupling:



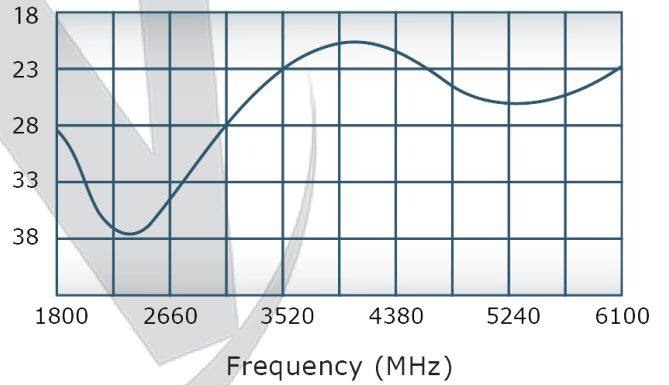
VSWR:



Insertion Loss:



Directivity:



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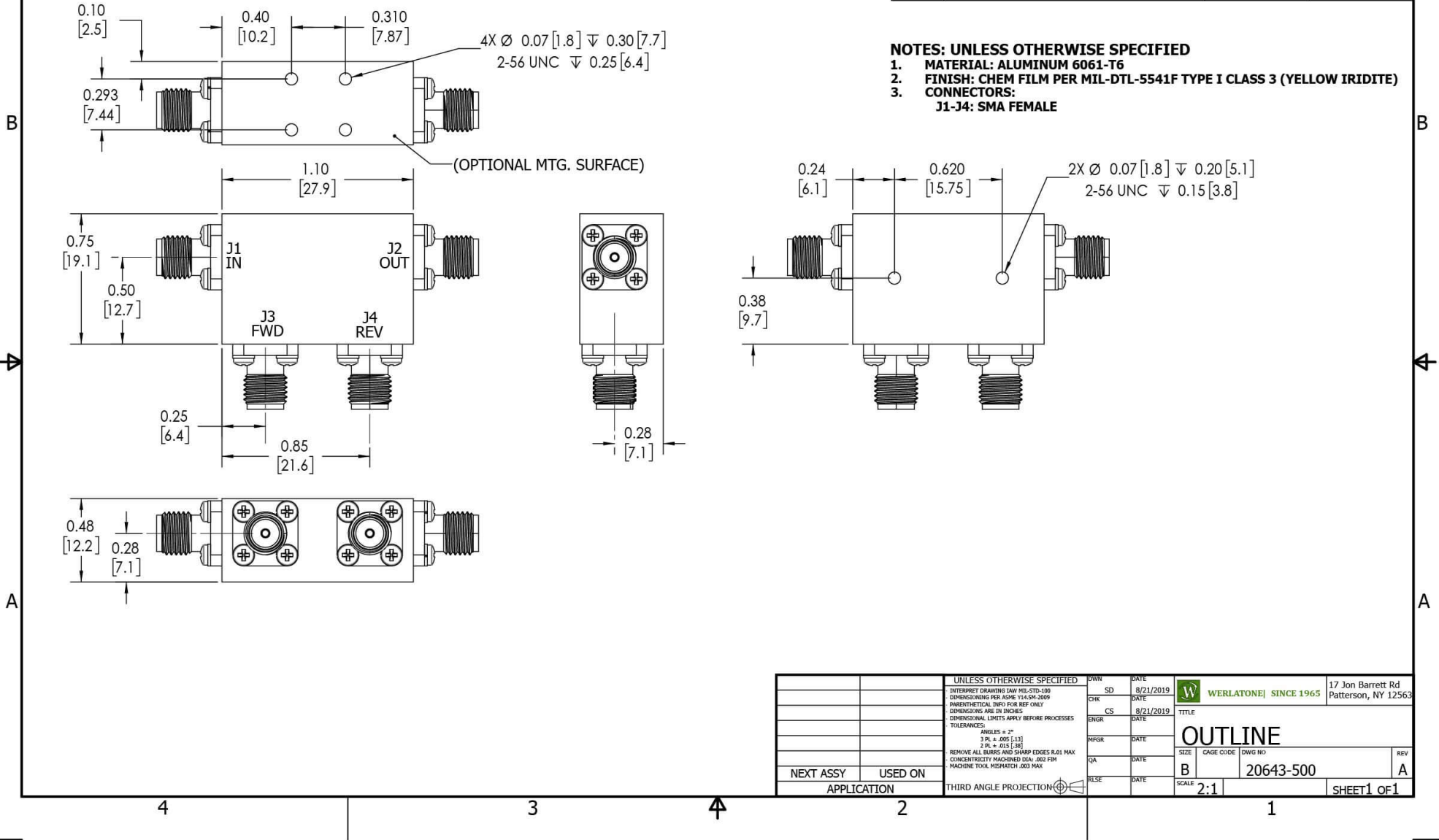
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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	8/21/2019	RB

**NOTES: UNLESS OTHERWISE SPECIFIED**

- MATERIAL: ALUMINUM 6061-T6**
- FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)**
- CONNECTORS: J1-J4: SMA FEMALE**



UNLESS OTHERWISE SPECIFIED		DWN	DATE	17 Jon Barrett Rd Patterson, NY 12563
INTERPRET DRAWING IAW MIL-STD-100	SD	8/21/2019		<b>WERLATONE SINCE 1965</b>
DIMENSIONS PER ASME Y14.5M-2009	CHK	DATE		
PARENTHEetical INFO FOR REF ONLY	CS	8/21/2019		TITLE
DIMENSIONS ARE IN INCHES	ENGR	DATE		<b>OUTLINE</b>
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES	INFR	DATE		SIZE
TOLERANCES:	QA	DATE		CAGE CODE
ANGLES = 2°	RLSE	DATE		DWG NO
3 PL ± .005 [1.3]				REV
2 PL ± .015 [3.8]				A
REMOVE ALL BURRS AND SHARP EDGES R.01 MAX				SCALE
CONCENTRICITY MACHINED DIA: .002 FIM				2:1
MACHINE TOOL MISMATCH .003 MAX.				20643-500
				SHEET 1 OF 1

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