



## PRODUCT DATA SHEET

QH7774

### Our patented 3 dB 90° Hybrid Couplers provide:

- Superior component performance starting at 3:1 Bandwidth.
- Thicker center boards for high power and increased repeatability.
- Bonded structures which eliminate any air gaps between substrates.
- More sections per bandwidth for better coupling flatness.
- Electrically shorter and physically smaller RF components.

### Features:

High Power      Wide Bandwidths      Small Size      Connectorized      Drop-In & Surface Mount

### Electrical Specifications:

Frequency: 100 - 1000 MHz  
 Power: 50 W CW  
 Insertion Loss: 0.6 dB Max.  
 VSWR: 1.30:1 Max.  
 Phase Balance:  $90^\circ \pm 5^\circ$  Max.  
 Amplitude Balance:  $\pm 1.0$  dB Max.  
 Isolation: 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  
 Weight: 1 lb.  
 Size: 5.1 x 2.1 x 1.1"

### Connector Configurations:

Model	Sum Port (J1)	Inputs (J2,J3)	Ext. Load Port
QH7774-10	N Female	N Female	N Female
QH7774-12	N Female	SMA	SMA
QH7774-102	SMA	SMA	SMA

**Werlatone's** breakthrough technology allows us to build our existing line of Broadband 3 dB High Power 90° Hybrid Couplers. Connectorized 3 dB 90° Hybrid Coupler models are available with a choice of connectors. Several of our existing High Power 3 dB 90° RF Couplers are three port designs, wherein the difference port is internally terminated with a high power termination. This eliminates the need for a customer supplied external load for each Hybrid Coupler.

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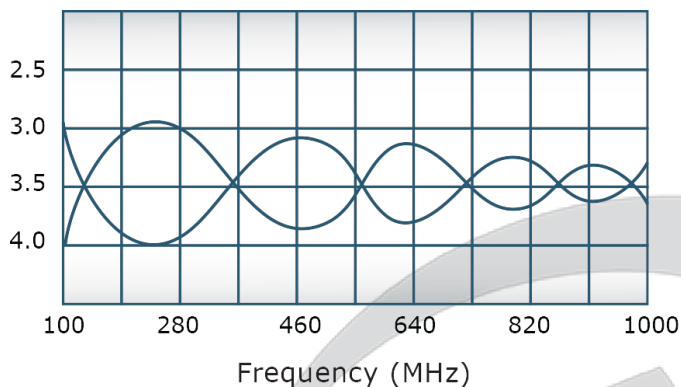


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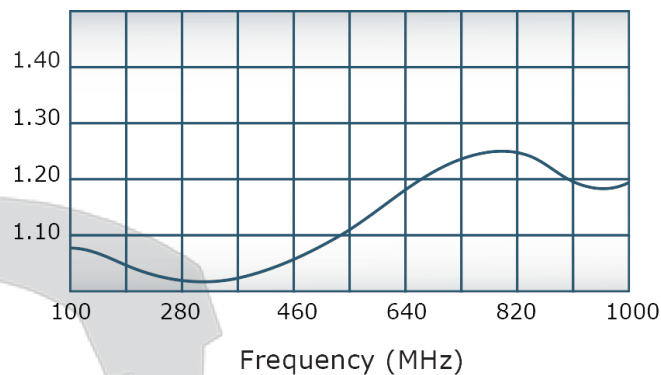
QH7774

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

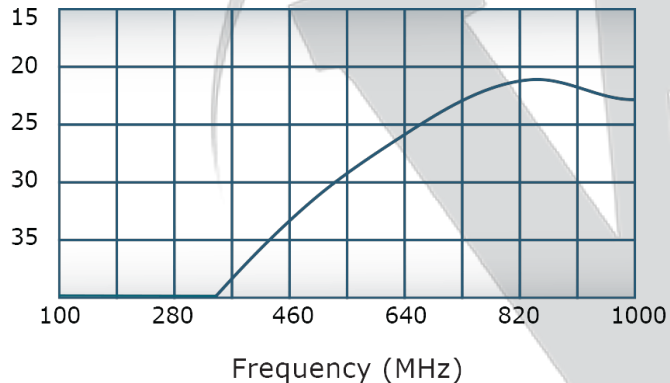
Coupling:



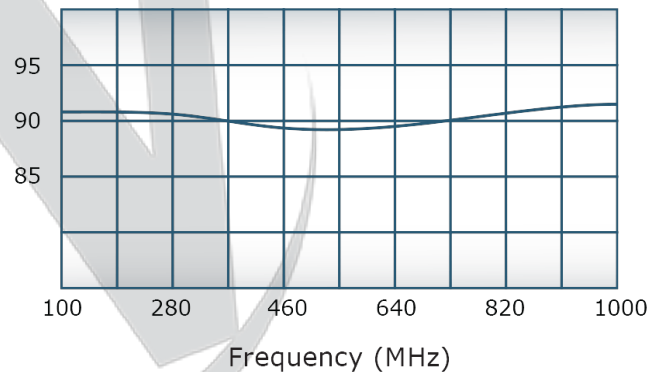
VSWR:



Isolation:



Phase Balance:

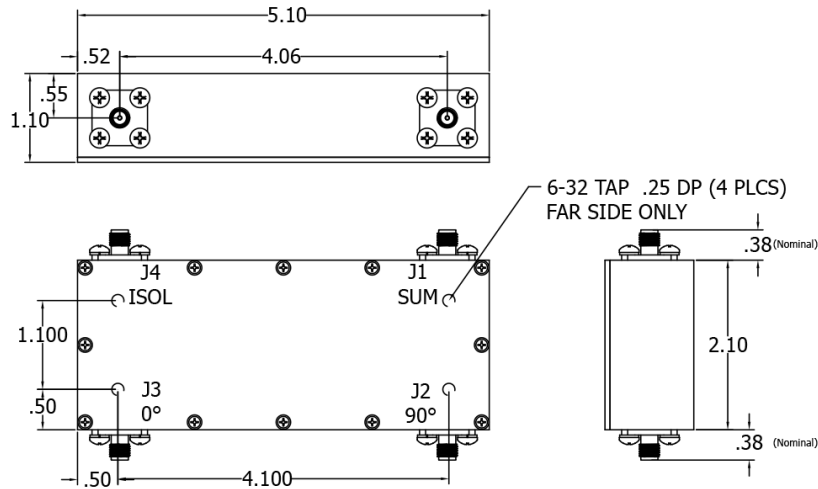


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REVISION HISTORY			
REV	REVISION RECORD	DATE	APPROVED
-	INITIAL RLS	6/14/2016	CS



20214-300	QH7774-102
NEXT ASSY	USED ON
APPLICATION	

- UNLESS OTHERWISE SPECIFIED
- INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100
  - DIMENSIONING PER ASME Y14.5M-2009
  - PARENTHESES ARE FOR REF ONLY
  - DIMENSIONS ARE IN INCHES
  - DIMENSIONAL LIMITS APPLY BEFORE PROCESSES
  - TOLERANCES: ANGLES ± 2°  
 3 PL ± .005  
 2 PL ± .015

THIRD ANGLE PROJECTION

DWN	DATE	 WERLATONE   SINCE 1965			17 Jon Barrett Rd Patterson, NY 12563		
NH	06/14/16						
CHK	DATE	TITLE					
CS	06/14/16						
ENGR	DATE	Outline					
BW	06/14/16						
MFGR	DATE	SIZE    CAGE CODE    DWG NO    REV					
QA	DATE						
RLSE	DATE	A	28812	20214-501		-	
		SCALE	1:2		SHEET 1 OF 1		

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