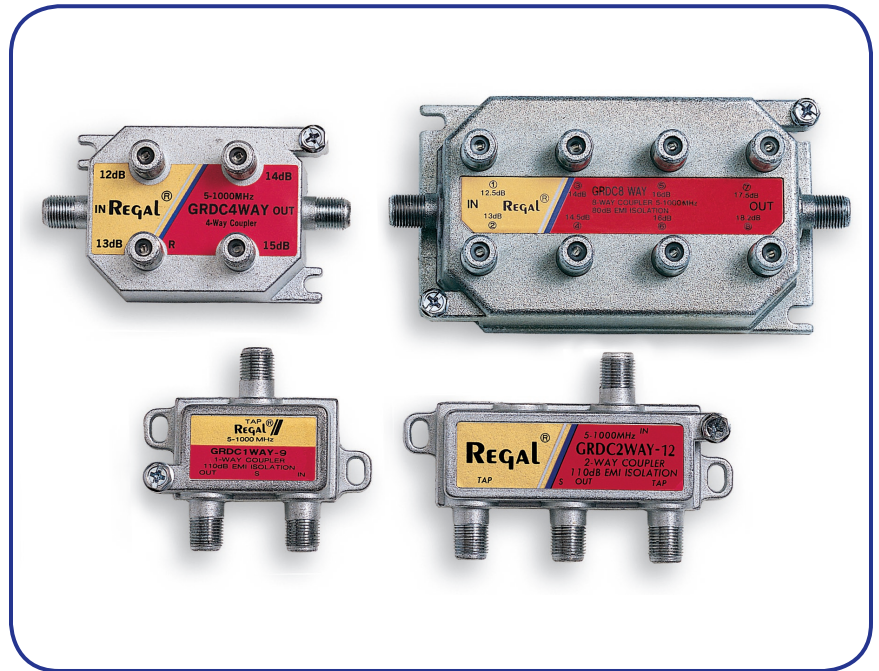




Regal®

1 GHz Gold/Red Series Indoor Taps



Features

- 1GHz bandwidth with low loss characteristics
- Chromate treated zinc alloy housing resists corrosion and extends product life
- Housing design prohibits water migration
- Tin plated phosphorus bronze conical center conductor seizure mechanisms
- Includes 1kV blocking capacitors
- UL® compliance
- ½" flat sealed F-ports
- Standard 1" spacing between F-port
- Printed wiring board
- Prevents ferrite core saturation and magnetization
- Heavy duty mounting tabs ensure secure mounting
- Mechanical integrity maintains EMI isolation and prevents breakage of the epoxy weather seal
- Various range of tap values to accommodate many applications

Application

Regal Gold/Red Series Taps offer the same quality features as our Gold/Red Splitters, but in an indoor tap configuration. 1 GHz bandwidth with low loss characteristics allow for advanced services that require more bandwidth. The tongue-and-groove housing design provides exceptional EMI isolation and environmental protection. The Gold/Red Indoor Tap is a cost-effective, quality tap that performs to 1 GHz.

Specifications

1 GHz Single Port Indoor Tap, in Horizontal Splitter Housing

Model # GRDC1-	6	9	12	16	20	24	27	30
Tap Loss (dB)	6.5	8.5	12.5	16	20	24	27	30
Tap Loss Tolerance								
5-1002 MHz	±1.5	±1.5	±1.5	±1.5	±1.5	±1.5	±1.5	±1.5
Insertion Loss (dB) (Max)								
5-470 MHz	2.4	1.9	0.9	0.7	0.7	0.7	0.7	0.7
471-862 MHz	2.7	2.2	1.1	1.0	1.0	1.0	1.0	1.0
863-1002 MHz	2.9	2.6	1.4	1.0	1.0	1.0	1.0	1.0
Input Return Loss (dB) (Min)								
5-40 MHz	18	18	18	18	18	18	18	18
41-80 MHz	23	23	26	26	26	26	26	26
81-160 MHz	21.5	21.5	24.5	24.5	24.5	24.5	24.5	24.5
161-320 MHz	20	20	23	23	23	23	23	23
321-640 MHz	18.5	18.5	21.5	21.5	21.5	21.5	21.5	21.5
641-862 MHz	17	17	20	20	20	20	20	20
863-1002 MHz	17	17	20	20	20	20	20	20
Output and Tap Return Loss (dB) (Min)								
5-40 MHz	15	15	15	15	15	15	15	15
41-80 MHz	20	20	20	20	20	20	20	20
81-160 MHz	19	19	19	19	19	19	19	19
161-320 MHz	18	18	18	18	18	18	18	18
321-640 MHz	17	17	17	17	17	17	17	17
641-862 MHz	16	16	16	16	16	16	16	16
863-1002 MHz	16	16	16	16	16	16	16	16
Isolation (dB) (Min)								
5-40 MHz	25	25	28	30	30	35	35	35
41-862 MHz	20	20	24	25	28	30	32	35
863-1002 MHz	18	18	21	23	26	28	30	32
EMI Shielding (dB) (Min)								
5-1002 MHz	110	110	110	110	110	110	110	110

Specifications are subject to change without notice.

Specifications (cont'd)

1 GHz Two Port Indoor Tap, Tap Ports are in a Vertical Configuration, Input and Output Ports are Horizontal

Insertion Loss (dB) (Max)

Model # GRDC2-	8	11	14	17	20	23	26	29
5-10 MHz	3.6	1.9	1.4	1.0	0.9	0.8	0.8	0.8
11-50 MHz	3.6	1.8	1.3	0.9	0.8	0.7	0.7	0.7
51-300 MHz	3.9	1.8	1.4	1.0	0.8	0.7	0.7	0.7
301-400 MHz	3.9	2.0	1.5	1.0	0.8	0.7	0.7	0.7
401-500 MHz	3.9	2.1	1.6	1.0	0.9	0.8	0.8	0.8
501-600MHz	4.0	2.3	1.7	1.0	1.0	0.9	0.9	0.9
601-700 MHz	4.1	2.5	1.8	1.1	1.1	1.0	1.0	1.0
701-800 MHz	4.2	2.6	1.9	1.1	1.1	1.1	1.1	1.1
801-900 MHz	4.3	2.7	2.1	1.2	1.2	1.2	1.2	1.2
901-1002 MHz	4.4	2.8	2.4	1.2	1.2	1.2	1.2	1.2

Output-to-Tap Isolation (dB) (Min)

5-10 MHz	23	22	25	25	28	36	35	42
11-50 MHz	25	23	26	27	30	37	37	44
51-300 MHz	25	22	24	27	30	35	35	40
301-400 MHz	25	20	22	27	28	33	33	35
401-500 MHz	25	20	21	23	26	32	32	35
501-600MHz	24	18	20	23	26	29	32	33
601-700 MHz	23	18	20	21	24	26	29	29
701-800 MHz	23	18	20	21	24	26	29	29
801-900 MHz	23	18	20	21	24	26	29	29
901-1002 MHz	22	18	20	21	22	24	27	28

Worst Case

Frequency (MHz)	5-10	11-20	21-400	401-500	501-600	601-900	901-1002
Tap Loss Tolerance (dB)	±1.0	±1.0	±1.0	±1.2	±1.3	±1.8	±2.0
Return Loss (dB)	15	18	20	18	17	17	16
Tap-to-Tap Isolation (dB)	20	23	23	23	21	20	19
EMI (dB)	110	110	110	110	110	110	110

Specifications are subject to change without notice.

Specifications (cont'd)

1 GHz Four Port Indoor Tap, Tap Ports are in a Vertical Configuration, Input and Output Ports are Horizontal, 5-1002 MHz Bandwidth

Insertion Loss (dB) (Max)

Model # GRDC4-	8	11	14	17	20	23	26	29
5-10 MHz	T	3.6	2.0	1.2	1.1	0.8	0.8	0.8
11-50 MHz	T	3.6	2.0	1.1	1.1	0.8	0.8	0.8
51-300 MHz	T	3.9	2.0	1.2	1.1	0.8	0.8	0.8
301-400 MHz	T	3.9	2.0	1.3	1.1	0.8	0.8	0.8
401-500 MHz	T	3.9	2.2	1.6	1.2	0.8	0.8	0.8
501-600MHz	T	4.0	2.4	1.6	1.2	0.9	0.9	0.9
601-700 MHz	T	4.1	3.0	1.8	1.3	1.0	1.0	1.0
701-800 MHz	T	4.2	3.0	1.9	1.4	1.1	1.1	1.1
801-900 MHz	T	4.3	3.3	2.1	1.4	1.2	1.2	1.2
901-1002 MHz	T	4.4	3.5	2.4	1.5	1.2	1.2	1.2

Output-to-Tap Isolation (dB) (Min)

5-10 MHz	T	25	25	25	35	35	42	42
11-50 MHz	T	27	27	26	37	37	42	42
51-300 MHz	T	27	27	30	35	35	38	38
301-400 MHz	T	27	27	28	33	33	35	35
401-500 MHz	T	23	23	26	32	32	35	35
501-600MHz	T	23	23	26	29	32	33	33
601-700 MHz	T	21	21	24	26	29	29	29
701-800 MHz	T	21	21	24	26	29	29	29
801-900 MHz	T	21	21	24	26	29	29	29
901-1002 MHz	T	21	21	22	24	27	28	28

Worst Case

Frequency (MHz)	5-10	11-20	21-400	401-500	501-600	601-900	901-1002
Tap Loss Tolerance (dB)	±1.0	±1.0	±1.0	±1.2	±1.3	±1.8	±2.0
Output Return Loss (dB)	15	18	20	18	17	17	16
Tap-to-Tap Isolation (dB)	20	23	23	23	22	20	20
Tap Return Loss (dB)	15	18	20	18	17	17	16
EMI (dB)	110	110	110	110	110	110	110

Specifications are subject to change without notice.

Specifications (cont'd)

1 GHz Eight Port Indoor Tap, Tap Ports are in a Vertical Configuration, Input and Output Ports are Horizontal

Insertion Loss (dB) (Max)

Model # GRDC8-	11	14	17	20	23	26	29
5-10 MHz	T	3.6	2.0	1.2	0.9	0.8	0.8
11-50 MHz	T	3.6	2.0	1.1	0.8	0.8	0.7
51-300 MHz	T	3.9	2.0	1.2	1.0	0.8	0.7
301-400 MHz	T	3.9	2.0	1.3	1.0	0.8	0.7
401-500 MHz	T	3.9	2.2	1.6	1.1	0.8	0.8
501-600 MHz	T	4.0	2.4	1.6	1.1	0.9	0.9
601-700 MHz	T	4.1	3.0	1.8	1.2	1.0	1.0
701-800 MHz	T	4.2	3.0	1.9	1.2	1.1	1.1
801-900 MHz	T	4.3	3.3	2.1	1.3	1.2	1.2
901-1002 MHz	T	4.4	3.5	2.4	1.4	1.2	1.2

Output-to-Tap Isolation (dB) (Min)

Tap Value	11	14	17	20	23	26	29
5-10 MHz	T	25	25	28	36	35	42
11-50 MHz	T	27	27	30	37	37	44
51-300 MHz	T	27	27	30	35	35	40
301-400 MHz	T	27	27	28	33	33	35
401-500 MHz	T	23	23	26	32	32	35
501-600 MHz	T	23	23	26	29	32	33
601-700 MHz	T	21	21	24	26	29	29
701-800 MHz	T	21	21	24	26	29	29
801-900 MHz	T	21	21	24	26	29	29
901-1002 MHz	T	21	21	22	24	27	28

Worst Case

Frequency (MHz)	5-10	11-20	21-400	401-500	501-600	601-900	901-1002
Tap Loss Tolerance (dB)	±1.0	±1.0	±1.0	±1.0	±1.2	±1.8	±2.0
Output Return Loss (dB)	15	18	20	18	17	17	16
Tap-to-Tap Isolation (dB)	20	23	23	23	22	21	20
EMI (dB)	110	110	110	110	110	110	110

Specifications are subject to change without notice.

1 GHz Gold/Red Series Indoor Taps

Ordering Information

Single Port

ARRIS #	Mfg #	Description
252208	GRDC1-6	6 dB
252209	GRDC1-8	8 dB
252210	GRDC1-12	12 dB
252211	GRDC1-20	20 dB
252212	GRDC1-24	24 dB
252213	GRDC1-27	27 dB
252214	GRDC1-30	30 dB

Two Port

ARRIS #	Mfg #	Description
252215	GRDC2-8	8 dB
252216	GRDC2-11	11 dB
252217	GRDC2-14	14 dB
252522	GRDC2-17	17 dB
252218	GRDC2-20	20 dB
252523	GRDC2-23	23 dB
252524	GRDC2-26	26 dB
252525	GRDC2-29	29 dB

Four Port

ARRIS #	Mfg #	Description
252219	GRDC4-8	8 dB
252220	GRDC4-11	11 dB
252221	GRDC4-14	14 dB
252222	GRDC4-17	17 dB
252223	GRDC4-20	20 dB
252224	GRDC4-23	23 dB
252225	GRDC4-26	26 dB
252226	GRDC4-29	29 dB

Eight Port

ARRIS #	Mfg #	Description
252227	GRDC8-11	11 dB
252228	GRDC8-14	14 dB
252229	GRDC8-17	17 dB
252230	GRDC8-20	20 dB
252231	GRDC8-23	23 dB
252232	GRDC8-26	26 dB
252233	GRDC8-29	29 dB

The capabilities, system requirements and/or compatibility with third-party products described herein are subject to change without notice. ARRIS, the ARRIS logo, Auspice™, C3™, C4®, C4c™, Cadant®, C-COR®, CHP Max®, ConvergeMedia™, Cornerstone®, CXM™, D5™, Digicon®, Flex Max®, Keystone™, MONARCH®, n5™, nABLE™, nVision®, OpsLogic®, OpsLogic® Service Visibility Portal™, PLEXIS®, PowerSense™, Regal®, ServAssure™, Service Visibility Portal™, TeleWire Supply®, TLX®, Touchstone®, VoiceAssure™, VSM™, and WorkAssure™ are all trademarks of ARRIS Group, Inc. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and the names of their products. ARRIS disclaims proprietary interest in the marks and names of others. © Copyright 2009 ARRIS Group, Inc. All rights reserved. Reproduction in any manner whatsoever without the express written permission of ARRIS Group, Inc. is strictly forbidden. For more information, contact ARRIS.

