

PRODUCT SELECTION GUIDE

Couplers • Splitters • Transformers

Couplers

Characteristic Impedance	Freq Range	Freq Range	Nominal
(Ω)	(Min) (MHz)	(Max) (MHz)	Coupling (dB)
50	5	500	10.0 ±0.5
50	5	1000	10.0 ±0.5
50	5	1000	6.5 ±0.5
75	5	1000	8.5 ±0.3
75	5	1000	10.0 ±0.5
75	5	1000	16.0 ±0.5
75	5	1000	20.5 ±0.5
75	5	1000	10.0 ±0.5
75	5	1000	16.0 ±0.5
75	5	1000	20.5 ±0.5
75	5	1000	16.0 ±0.5
75	5	1200	10.0 ±0.5
75	5	1200	10.0 ±0.5
75	5	1200	16.0 ±0.5
75	5	1200	16.0 ±0.5
75	5	1200	20.5 ±0.5
75	5	1200	7.0 ±0.5
75	5	1200	10.0 ±0.5

2-Way Splitters

Characteristic Impedance	Freq Range	Freq Range	Return Loss
(Ω)	(Min) (MHz)	(Max) (MHz)	(Min) (dB)
50	1	500	14
50	1	650	14
50	5	1000	9.6
50	5	1200	14
50	800	980	17.7
50	1600	2000	11
50	1700	2500	9.6
50	1800	2200	11
75	5	65	20
75	5	1000	17.7
75	30	1000	20
75	5	1200	12



Coupling	Mainline Loss	Directivity (dB)	Return Loss		Part
Flatness (dB)	(dB)		(Min) (dB)	Package	Number
±0.5	0.8	30	15	S06	CPA-0501-510H
±0.5	1.2	25	14	S06	CPA-1001-510H
±0.5	1.9	15	12	S06	CPA-1001-56H
±0.5	1.7	20	14	S06	CPA-1001-708H
±0.5	1.2	14	14	S06	CPA-1001-710H
±0.5	0.6	30	14	S06	CPA-1001-716H
±0.7	0.4	20	17	S06	CPA-1001-720H
±0.5	1.2	25	14	S01	CPK-1001-710H
±0.5	0.6	30	14	S01	CPK-1001-716H
±0.5	0.4	20	17	S01	CPK-1001-720H
±0.75	0.75	22	24	S18	RFCP4792
±0.5	1.5	14	11	S18	RFCP5742
±0.5	1.5	14	14	S20	RFCP5743
±0.5	0.6	20	14	S18	RFCP5762
±0.5	0.8	20	14	S20	RFCP5763
±0.5	0.5	20	17	S20	RFCP5773
±0.5	1.6	18	21	S20	MRFCP0013
±0.5	1.1	18	18	S20	MRFCP0014

Isolation	Insertion Loss		Part
(dB)	(dB)	Package	Number
25	0.4	S06	SPA-0501-25H
25	0.4	S06	SPA-0701-25H
16	0.4	S06	SPA-1002-25H
22	1	S18	RFSP5522
23	0.2	S06	SPA-1001-25H
18	0.4	S10	SPC-2001-25H
24	0.5	S06	SPA-2501-25H
23	0.5	S10	SPC-2201-25H
35	0.2	S06	SPA-0101-27H
30	0.5	S06	SPA-1002-27H
30	0.5	S06	SPA-1003-27H
28	0.8	S18	RFSP5722



3-Way Splitters

Characteristic Impedance	Freq Range	Freq Range	Return Loss
(Ω)	(Min) (MHz)	(Max) (MHz)	(Min) (dB)
75	5	200	21
75	20	1200	14

4-Way Splitters

Characteristic Impedance	Freq Range	Freq Range	Return Loss
(Ω)	(Min) (MHz)	(Max) (MHz)	(Min) (dB)
75	5	1002	22

Transformers

Туре	Impedance	Freq Range	Freq Range
	Ratio	(Min) (MHz)	(Max) (MHz)
Unbalanced to Balanced	1:1	0.3	200
Unbalanced to Balanced	1:2	2	350
Unbalanced to Balanced	1:4	1	350
Unbalanced to Balanced	1:1	5	200
Unbalanced to Balanced	1:4	2	1000
Unbalanced to Balanced	1:1.5	0.5	550
Unbalanced to Balanced	1:1	5	1200
Unbalanced to Balanced	1:1	5	1200
Unbalanced to Balanced	1:1	5	1200
Unbalanced to Balanced	1:1	5	1200
Unbalanced to Balanced	1:4	5	1200
Unbalanced to Balanced	1:1	5	1200
Unbalanced to Balanced	1:1	5	1200
Unbalanced to Balanced	1:1	5	1200
Unbalanced to Balanced	1:4	10	1900
Unbalanced to Balanced	1:4	500	2500
Unbalanced to Balanced	1:1	3	3000
Unbalanced to Balanced	1:1	5	3000
Unbalanced to Unbalanced	1:16	0.165	75
Balanced to Balanced	1:1	0.008	100
Unbalanced to Unbalanced	1:2.5	0.011	100
Unbalanced to Balanced	1:1	0.006	150
Unbalanced to Balanced	1:8	0.05	125
Unbalanced to Balanced	1:1	0.05	300
Balanced to Balanced	1:4	0.1	240



Isolation	Insertion Loss		Part
(dB)	(dB)	Package	Number
30	0.35	S04	RFSP2731
25	1.5	S04	RFSP5731
Isolation	Insertion Loss		Part
(dB)	(dB)	Package	Number
25	0.75	S25	MRFSP0012
(dB) 25	(dB) 0.75	Package S25	Number MRFSP0012

	Part
Package	Number
S20	RFXF2513
S20	RFXF2533
S20	RFXF2553
S20	RFXF2713
S20	RFXF3553
S20	RFXF3593
S18	RFXF5702
S20	RFXF5703
S21	RFXF5704
S18	RFXF5712
S20	RFXF5753
S18	RFXF5792
S20	RFXF5793
S21	RFXF5794
S20	RFXF6553
S20	RFXF8553
S20	RFXF9503
S21	RFXF9504
S06	XFA-0101-16UH
S06	XFA-0101-1BH
S06	XFA-0101-25UH
S06	XFA-0201-1WH
S06	XFA-0201-8WH
S06	XFA-0301-1WH
S06	XFA-0301-4BH

MiniRF is dedicated to providing quality RF passive components at competitive prices for existing and emerging Broadband/CATV and Wireless Communications Systems. MiniRF is a proven leader in supplying high performance surface mount passive components.



Transformers continued...

Туре	Impedance	Freq Range	Freq Range
	Ratio	(Min) (MHz)	(Max) (MHz)
Unbalanced to Unbalanced	1:4	0.05	220
Unbalanced to Unbalanced	1:1	1	400
Unbalanced to Unbalanced	1:1	40	1000
Unbalanced to Balanced	1:16	13	200
Unbalanced to Balanced	1:4	8	900
Unbalanced to Unbalanced	1:1	40	1000
Unbalanced to Unbalanced	1:1	2.5	2000
Unbalanced to Balanced	1:1	3	200
Unbalanced to Balanced	1:4	3.5	700
Unbalanced to Unbalanced	1:1	15	1003
Unbalanced to Balanced	1:4	1	1000
Unbalanced to Unbalanced	1:1	40	1000
Unbalanced to Unbalanced	1:1	800	1900
Unbalanced to Balanced	1:4	500	2500
Unbalanced to Unbalanced	1:1	5	3000
Unbalanced to Unbalanced	1:1	5	1000
Unbalanced to Balanced	1:4	5	1000
Unbalanced to Balanced	1:1	1	2500
Unbalanced to Balanced	1:16	5	40
Unbalanced to Balanced	1:4	5	1200
Unbalanced to Balanced	1:1.8	5	200
Unbalanced to Balanced	1:1	0.4	500
Unbalanced to Balanced	1:1	5	1200
Unbalanced to Balanced	"1:2	5	1200
Unbalanced to Balanced	1:1	5	200
Unbalanced to Balanced	1:1.5	5	100
Unbalanced to Balanced	1:4	5	100
Unbalanced to Balanced	1:2	5	1200



	Part
Package	Number
S06	XFA-0301-4UH
S06	XFA-0401-1UH
S06	XFA-1001-1UH
S01	XFK-0201-16WH
S01	XFK-0901-4WH
S01	XFK-1001-1UH
S01	XFK-2001-1UH
S03	XFM-0201-1WH
S03	XFM-0701-4WH
S03	XFM-1001-1UH
S03	XFM-1001-4WH
S03	XFM-1002-1UH
S03	XFM-1901-1UH
S03	XFM-2501-4WH
S03	XFM-3001-1UH
S09	XFP-1001-1UH
S09	XFP-1001-4WH
S09	XFP-2501-1UH
S20	RFXF0573
S20	RFXF5553
S19	RFXF2795
S20	RFXF3513
S20	RFXF5743
S18	RFXF5732
S20C	RFXF0013
S20C	RFXF0014
S20C	RFXF0016
S20	MRFXF5733







1.2ghz/3.0ghz Frequency Components Available



Products & Services Include:

Surface Mount Couplers



MiniRF produces miniature couplers designed for applications that require small, low cost, and highly reliable surface mount components. Coupler

applications may be found in Broadband/CATV Communications Systems. A number of surface mount packaging options are available including: S06, S18, and S20 packaging styles.

Surface Mount Splitters

MiniRF produces 1Ghz and 4-Way bandwidth miniature 0° two way power splitters designed for both 50Ω and 75Ω applications which require small, low cost and highly reliable surface mount components. Applications include Broadband, CATV, and Wireless communications systems.

NEW! 4-way Passive Splitters

MiniRF announces its latest design and sampling for its 4-way splitter, model MRFSP0012. Covering the common CATV bandwidth of 5 to 1002MHz, the MRFSP0012 replaces three, 2-way splitters commonly used to achieve a 1 to 4 split thus saving board space, reducing part count and offering easier design configuration. Additionally, the MiniRF MRFSP0012 offers a cost savings over comparable performing, multi-splitter topologies.



Mid-band insertion loss is typically 0.75dB with 25dB isolation. Amplitude balance is typically <0.1 dB while phase balance is typically <1 degree with a maximum of 2.0 degrees. A 75 ohm characteristic impedance makes the MiniRF MRFSP0012 ideal for Broadband/CATV applications. The MRFSP0012 comes on a castellated, surface mount board measuring 0.25x0.50x0.07 inches.

For sales or technical support, contact: sales@minirf.com

Global RF Passive Component Provider

MiniRF

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Chokes



MiniRF also produces miniature RF Chokes for a variety of Broadband/CATV

applications. Please contact us with your specific requirements and applications.

Surface Mount Transformers



MiniRF produces miniature transformers for designs which require small, low

cost, and highly reliable surface mount components. Both 50Ω and 75Ω applications are supported in the product offering. Impedance ratios of 1:1, 1:4, 1:8, 1:16 are typical in support of applications in broadband, wireless, and other RF communications systems.