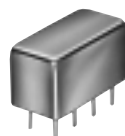


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continuous facing pages.**

# POWER SPLITTERS/COMBINERS 50Ω

Plug-In

## 2 WAY-90° 0.42 MHz to 1875 MHz



PSCQ-2 / POW-2

MODEL NO.	FREQ. RANGE MHz $f_L$ - $f_U$	ISOLATION dB		INSERTION LOSS, dB Avg. of Coupled Outputs less 3 dB		PHASE UNBALANCE Degrees Max.	AMPLITUDE UNBALANCE dB Max.	CASE STYLE Note B	CONNECTION	PRICE \$ Qty. (1-9)
		Typ.	Min.	Typ.	Max.					
POW-2-90	30-90	27	20	0.3	0.6	3	1.0	A01	gy	29.95
PQW-2-270	90-270	20	17	0.4	0.7	4	1.4	A01	gy	31.95
PSCQ-2-0.455	0.42-0.51	30	25	0.1	0.5	3	1.2	A01	aw	27.95
PSCQ-2-1.25	1.13-1.38	29	25	0.4	0.7	3	1.2	A01	aw	15.95
PSCQ-2-3.4	3.0-3.8	30	25	0.4	0.7	3.8	1.2	A01	aw	21.95
PSCQ-2-4	3.5-4.5	36	25	0.4	0.7	3	1.5	A01	aw	15.95
PSCQ-2-7.5	7-8	35	25	0.4	0.7	3	1.2	A01	aw	15.95
PSCQ-2-8	2-8	36	27	0.3	0.7	6	0.5	A01	gx	51.95
PSCQ-2-10.5	9-11	25	20	0.4	0.7	3	1.2	A01	aw	15.95
PSCQ-2-13	12-14	29	25	0.4	0.7	3	1.2	A01	aw	15.95
PSCQ-2-14	12-16	30	25	0.3	0.6	3	1.8	A01	aw	21.95
PSCQ-2-21.4	20-23	30	25	0.4	0.7	3	1.2	A01	aw	15.95
PSCQ-2-26	14-30	25	20	0.4	0.7	3	1.5	A01	aw	25.95
PSCQ-2-32	3.2-32	32	25	0.4	0.8	5	0.4	A01	gx	91.95
PSCQ-2-40	23-40	21	18	0.3	0.7	3	1.5	A01	aw	21.95
PSCQ-2-50	25-50	30	20	0.3	0.7	3	1.5	A01	aw	25.95
PSCQ-2-70	40-70	30	20	0.3	0.7	3	1.5	A01	aw	25.95
PSCQ-2-70N	66-74	22	19	0.2	0.5	0.8	0.25	A01	aw	25.95
PSCQ-2-85A	55-85	35	20	0.3	0.6	3	0.6	A01	ax	26.95
PSCQ-2-90	55-90	30	20	0.3	0.7	3	1.2	A01	aw	25.95
PSCQ-2-120	80-120	25	18	0.3	0.7	3	1.5	A01	aw	25.95
PSCQ-2-160	100-160	24	19	0.3	0.7	3	1.5	A01	aw	25.95
PSCQ-2-180	120-180	23	15	0.3	0.7	4	1.2	A01	aw	25.95
PSCQ-2-250	150-250	30	22	0.4	0.8	4	1.5	A01	aw	25.95
PSCQ-2-400	250-400	23	16	0.5	0.9	4	1.5	A01	aw	25.95
PSCQ-2-450	350-450	23	16	0.5	0.9	5	1.5	A01	aw	25.95
PSCQ-2-550	450-550	19	15	0.4	0.7	5	1.5	A01	aw	25.95
PSCQ-2-1000	800-1000	27	20	0.28	0.6	3	1.3	A05	ax	27.95

### NOTES:

- ◆ Aqueous washable. For non-aqueous requirements, LRPO units available in case style QQQ130.
- Non-hermetic
- \* Protected under U.S. patent 6133525
- \*\* LRPO units have bottom barrier ground plane insulated with glass barrier.
- A. General Quality Control Procedures, Environmental Specifications, Hi-Rel and MIL description are given in section 0, see "Mini-Circuits Guarantees Quality" article.
- B. Connector types and case mounted options, case finishes are given in section 0, see "Case styles & Outline Drawings".
- C. Prices and specifications subject to change without notice.
- 1. Absolute maximum power, voltage and current ratings:
  - 1a. Matched power rating
 

models PSCQ-2-8, PSCQ-2-32	50mWatt
models SCPO-10.5	0.5 Watt
all other models	1Watt
  - 1b. Internal load dissipation 0.125 Watt

### NSN GUIDE

MCL NO.	NSN
PSCQ-2-21.4	6625-01-415-3074
PSCQ-2-180	6625-01-186-4456
PSCQ-2-90	6625-01-160-0151
PSCQ-2-70	5985-01-292-8834
PSCQ-2-50	5895-01-374-0023
PSCQ-2-550	5895-01-347-0206



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# Surface Mount □



ADPQ      JSPO (BK343)      JSPO (BK276)      JYPO      LRPO-J      RPO      SCPO      SYPO

MODEL NO.	FREQ. RANGE MHz $f_c$ - $f_u$	ISOLATION dB		INSERTION LOSS, dB Avg. of Coupled Outputs less 3 dB		PHASE UNBALANCE Degrees Max.	AMPLITUDE UNBALANCE dB Max.	CASE STYLE Note B	NOTES	PRICE \$ Qty. (1-9)
		Typ.	Min.	Typ.	Max.					
<b>NEW</b> ◆ ADPQ-2-250*	150-250	24	17	0.2	0.7	4	1.4	CD637	ay	9.95
◆ JSPO-80	10-80	44	30	0.45	1.4	6	0.6	BK276	mq	19.95
◆ JSPO-350	150-350	20	13	0.5	1.0	5	1.5	BK276	lu	14.95
◆ JSPO-1875W	1325-1875	28	18	0.2	0.5	6	1.0	BK343	ja	17.95
◆ JSPO-100	40-100	24	18	0.2	0.6	3	1.2	BK276	hm	14.95
<b>NEW</b> ◆ JSPO-100A	30-100	41	30	0.5	1.1	4	0.6	BK276	mq	19.95
<b>NEW</b> JYPO-16	10-16	43	25	0.2	0.6	4	0.9	BJ293	kx	19.95
JYPO-30	16-30	28	20	0.2	0.7	3	1.5	BJ293	kx	14.95
JYPO-160	105-160	24	17	0.25	0.6	3	1.5	BJ293	kx	14.95
◆ LRPO-70J**	65-75	30	20	0.1	0.5	3	1	QQQ569	ay	9.95
◆ LRPO-700J**	500-700	23	18	0.2	0.6	3	1.8	QQQ569	ay	9.95
◆ LRPO-980J**	820-980	28	20	0.15	0.5	4	1	QQQ569	ay	13.95
◆ LRPO-320J**	270-320	21	18	0.3	0.6	3	1.2	QQQ569	lr	10.95
RPO-820	760-860	22	15	0.15	0.7	4	1	TT240	gp	13.95
RPO-1495	1400-1600	18	14	0.3	0.8	5	1	TT240	gp	15.95
SCPO-10.5	9-11	31	20	0.15	0.7	3	1.2	YY101	aw	13.95
SCPO-21.4	20-23	32	25	0.15	0.5	2.5	1	YY101	aw	13.95
SCPO-50	25-50	25	20	0.15	0.7	3	1.5	YY101	aw	14.95
SCPO-60	30-60	30	20	0.15	0.7	3	1.5	YY101	aw	14.95
SCPO-85C	55-85	30	20	0.3	0.6	3	0.6	YY101	gy	14.95
SCPO-90	55-90	26	20	0.2	0.7	3	1.2	YY101	aw	13.95
SCPO-150	95-150	22	18	0.3	0.7	3	1.2	YY101	aw	14.95
SCPO-180	120-180	20	16	0.3	0.7	3	1.2	YY161	aw	13.95
SCPO-400	250-400	20	16	0.3	0.7	3	1.2	YY161	aw	14.95
SYPO-70	65-75	31	24	0.1	0.4	3	1.1	AH202	av	13.95

pin connections see case style outline drawings

PORT	av	aw	ax	ay	gp	gx	gy	hm	ja	kx	lu	lr	mq
SUM PORT	1	1	1	6	4	1	1	9	1	8	1	1	1
PORT 1	5	2	2	4	1	2	2(0°)	2(0°)	8	1	3(0°)	3	7
PORT 2	8	5	8	1	3	5	6(90°)	6(-90°)	14	4	12(90°)	6	8
GND EXT.	2,3,6,7	3,4,7,8	3,4,5,6 3,5,6	2,5	2,5	3,4,7,8	3,4,7,8	1,3,4,5,7,8 10,11,12,14	2,3,4,5,6,9 10,11,12,13	2,3,6,7	5,7,8,10	2,5	2,3,4,5,6,9 10,11,12,13,14
50 OHM TERM.	4	6	7	3	6	—	5	13	7	5	14	4	—
NOT USED	—	—	—	—	—	—	—	—	—	—	2,4,6,9,11,13	—	—



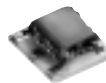
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# POWER SPLITTERS/COMBINERS $50\Omega$

## 2 WAY-90° 380 MHz to 1460 MHz



HPO

MODEL NO. ◆	FREQ. RANGE MHz $f_l$ - $f_u$	ISOLATION dB		INSERTION LOSS, dB Avg. of Coupled Outputs less 3 dB		PHASE UNBALANCE Degrees		AMPLITUDE UNBALANCE dB		VSWR (:1)		CASE STYLE Note B	OC C F I O N	PRICE \$ Qty. (10-49)
		Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	S Typ.	OUT Typ.			
HPO-05	410 - 455	25	20	0.17	0.35	0.5	3	0.5	1.0	1.12	1.12	AT577	km	6.95
HPO-05W	380 - 490	25	20	0.20	0.40	0.6	3	1.1	1.6	1.12	1.12	AT577	km	6.95
HPO-06	510 - 570	26	18	0.20	0.40	0.6	3	0.5	1.2	1.10	1.12	AT577	km	6.95
HPO-06W	480 - 600	26	18	0.20	0.40	0.6	3	0.9	1.6	1.10	1.12	AT577	km	6.95
HPO-07	580 - 690	24	18	0.20	0.40	0.5	3	0.8	1.6	1.17	1.17	AT577	km	6.95
HPO-08	680 - 790	24	18	0.25	0.40	0.8	3	0.6	1.6	1.10	1.20	AT577	km	6.95
HPO-09	730 - 800	25	20	0.20	0.40	0.6	3	0.6	1.2	1.14	1.14	AT577	km	6.95
HPO-09W	690 - 830	24	20	0.20	0.40	0.7	3	1.1	1.6	1.14	1.14	AT577	km	6.95
HPO-10	900 - 970	22	17	0.25	0.45	0.7	4	0.5	1.2	1.17	1.17	AT577	km	6.95
HPO-10W	880 - 1030	22	16	0.28	0.50	1.0	4	0.85	1.6	1.17	1.17	AT577	km	6.95
HPO-11	980 - 1070	23	18	0.25	0.50	0.5	3.5	0.4	1.2	1.17	1.17	AT577	km	6.95
HPO-12	990 - 1100	21	16	0.25	0.45	0.8	4	0.5	1.2	1.20	1.20	AT577	km	6.95
HPO-12W	940 - 1130	21	16	0.30	0.50	1.0	4	0.8	1.6	1.20	1.20	AT577	km	6.95
HPO-15	1320 - 1430	19	15	0.30	0.50	1.8	5	0.35	1.2	1.22	1.22	AT577	km	6.95
HPO-15W	1240 - 1460	19	15	0.30	0.60	1.8	5	0.8	1.6	1.22	1.22	AT577	km	6.95

### features

- excellent amplitude and phase unbalance
- good insertion loss
- good isolation
- excellent input VSWR
- excellent output VSWR
- excellent unit-to-unit repeatability

### applications

- image rejection mixer
- wideband amplifier matching
- I&Q modulator

### NOTES:

- ◆ HPO models, aqueous washable.
- A. Environmental specifications and re-flow soldering information available in General Information Section.
- B. Units are non-hermetic unless otherwise noted. For details on case dimensions & finishes see "Case Styles & Outline Drawings".
- C. Prices and Specifications subject to change without notice.
- 1. Absolute maximum power, voltage and current ratings:
  - 1a. Matched power rating 1Watt

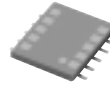
### pin connections

see case style outline drawings

PORT	km
SUM PORT	3
PORT 1	6
PORT 2	4
GND EXT.	2,5
50 OHM TERM.	1
DEMO BOARD	TB-43

## Surface Mount

### 800 MHz to 2400 MHz



QBA

MODEL NO. ◆	FREQ. RANGE MHz $f_L$ - $f_U$	ISOLATION dB		◆ INSERTION LOSS, dB Avg. of Coupled Outputs less 3 dB			PHASE UNBALANCE Degrees Max.	AMPLITUDE UNBALANCE dB Max.	CASE STYLE Note B	CON- NEX- TION	PRICE \$ Qty. (10-49)
		Typ.	Min.	$f_L$ $\bar{x}$	$f_U$ $\bar{x}$	$\sigma$					
QBA-12N*	800-900	28	20	0.25	0.30	.02	3.0	1.0	SM33	If	6.95
QBA-12*	800-1200	23	14	0.25	0.44	.02	6.0	1.2	SM33	If	6.95
QBA-20*	1800-2000	23	18	0.47	0.54	.02	4.0	0.7	SM33	If	6.95
QBA-20W*	1500-2200	23	16	0.41	0.58	.02	5.0	1.2	SM33	If	6.95
QBA-24*	1900-2400	21	17	0.54	0.71	.02	6.0	0.8	SM33	If	6.95
QBA-24W*	1700-2400	21	15	0.49	0.71	.02	6.0	1.2	SM33	If	6.95

◆ Includes test fixture losses.

BLUE CELL

#### features

- low insertion loss, 0.25 dB typ. (QBA-12N)
- high power capability (50 watts for QBA-12N)
- high isolation, 28 dB typ. (QBA-12N)
- ceramic body, good for heat dissipation
- solder plated leads for excellent solderability

#### applications

- cellular
- instrumentation
- PCN



*Incorporates multi-layer monolithic ceramic substrates for moderate bandwidth and low cost RF/Microwave products*

#### NOTES:

- ◆ QBA models, aqueous washable.
- \* BLUE CELL™ power splitters protected by U.S. Patents 5534830 & 5640699
- A. Environmental specifications and re-flow soldering information available in General Information Section.
- B. Units are non-hermetic unless otherwise noted. For details on case dimensions & finishes see "Case Styles & Outline Drawings".
- C. Prices and Specifications subject to change without notice.
- 1. Absolute maximum power, voltage and current ratings:
  - 1a. Matched power rating, as splitters
    - QBA-12N/-12, 50W max. below 25°C. Derate linearly to 10W at 85°C.
    - QBA-20/-20W, 25W max. below 25°C. Derate linearly to 5W at 85°C.
    - QBA-24/-24W, 20W max. below 25°C. Derate linearly to 4W at 85°C.

#### pin connections

see case style outline drawings

PORT	If
SUM PORT	1
PORT 1	10(0°)
PORT 2	6(-90°)
GND EXT.	2,3,4,7,8,9
50 OHM TERM.	5
NOT USED	—



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