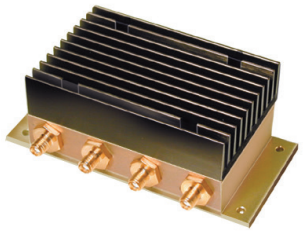
DC Pass

High Power Combiner

ZB3CS-920-15W

3 Way-0° 50Ω 825 to 920 MHz



CASE STYLE: AW256

Connectors	Model
SMA	ZB3CS-920-15W-S

Maximum Ratings

Operating Temperature	-55°C to 90°C
Storage Temperature	-55°C to 100°C
DC Current	600 A (200mA for each port)

Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

SUM PORT	S
PORT 1	1
PORT 2	2
PORT 3	3

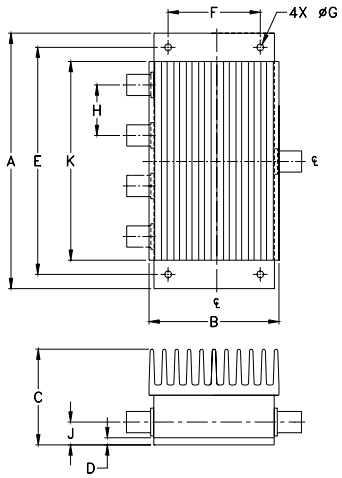
Features

- high power, up to 15W input power
- low insertion loss, 0.2 dB typ.
- high isolation, 27 dB typ.

Applications

- cellular
- UHF

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F
4.50	2.25	1.69	.125	4.000	1.625
114.30	57.15	42.93	3.18	101.60	41.28

G	H	J	K	wt
.144	.890	.44	3.50	grams
3.66	22.61	11.18	88.90	500

High Power Combiner Electrical Specifications

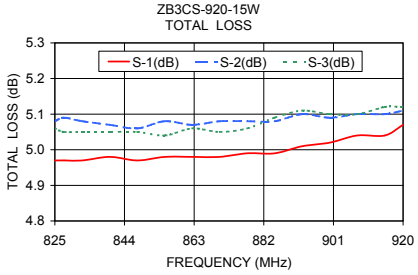
FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 4.8 dB		PHASE UNBALANCE (Degrees)		AMPLITUDE UNBALANCE (dB)		POWER INPUT[1] (W)	
									as combiner[2]	as splitter
f_L-f_U	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.
825-920	27	17	0.2	0.8	1.7	6.0	0.11	0.5	15	15

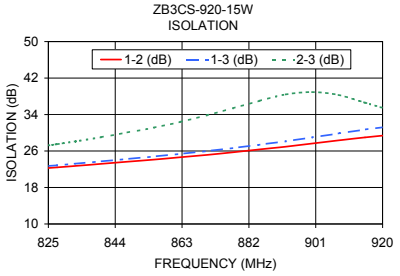
1. Over -55°C to +55°C. Derate linearly to 20% of rating at 90°C
2. As a combiner of non-coherent signals, max. power per port is power rating divided by number of ports.

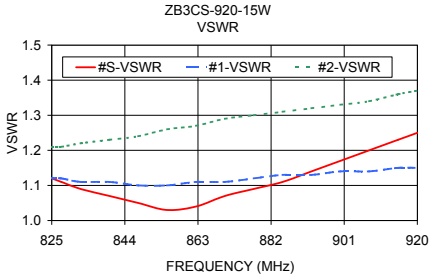
Typical Performance Data

Freq. (MHz)	Total Loss[1] (dB)			Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3
	S-1	S-2	S-3		1-2	1-3	2-3					
825.00	4.97	5.08	5.06	0.11	22.28	22.71	27.23	1.74	1.12	1.12	1.21	1.15
827.50	4.97	5.09	5.05	0.12	22.42	22.87	27.51	1.80	1.11	1.12	1.21	1.15
832.50	4.97	5.08	5.05	0.11	22.72	23.20	28.09	1.73	1.09	1.11	1.22	1.15
840.00	4.98	5.07	5.05	0.10	23.19	23.72	29.03	1.93	1.07	1.11	1.23	1.16
847.50	4.97	5.06	5.05	0.09	23.66	24.25	30.07	1.91	1.05	1.10	1.24	1.16
855.00	4.98	5.08	5.04	0.10	24.12	24.79	31.13	1.92	1.03	1.10	1.26	1.17
862.50	4.98	5.07	5.06	0.09	24.64	25.37	32.39	1.96	1.04	1.11	1.27	1.18
870.00	4.98	5.08	5.05	0.10	25.14	25.97	33.82	2.07	1.07	1.11	1.29	1.18
877.50	4.99	5.08	5.06	0.10	25.73	26.66	35.38	2.09	1.09	1.12	1.30	1.19
885.00	4.99	5.08	5.09	0.10	26.36	27.39	37.01	2.25	1.11	1.13	1.31	1.20
892.50	5.01	5.10	5.11	0.09	26.95	28.14	38.41	2.34	1.14	1.13	1.32	1.20
900.00	5.02	5.09	5.10	0.07	27.64	28.98	38.93	2.42	1.17	1.14	1.33	1.21
907.50	5.04	5.10	5.10	0.06	28.34	29.85	38.29	2.38	1.20	1.14	1.34	1.21
915.00	5.04	5.10	5.12	0.08	28.99	30.71	36.60	2.45	1.23	1.15	1.36	1.22
920.00	5.07	5.11	5.12	0.06	29.38	31.21	35.47	2.53	1.25	1.15	1.37	1.22

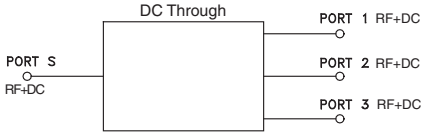
1. Total Loss = Insertion Loss + 4.8dB splitter loss.







electrical schematic



Notes

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