

Coaxial

# Power Splitter/Combiner

## ZFSC-2-6+

2 Way-0° 50Ω 0.002 to 60 MHz



Generic photo used for illustration purposes only  
CASE STYLE: K18

Connectors	Model
BNC	ZFSC-2-6+
SMA	ZFSC-2-6-S+
N-TYPE	ZFSC-2-6-N+
<b>BRACKET (OPTION)</b>	

**+RoHS Compliant**  
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

### Maximum Ratings

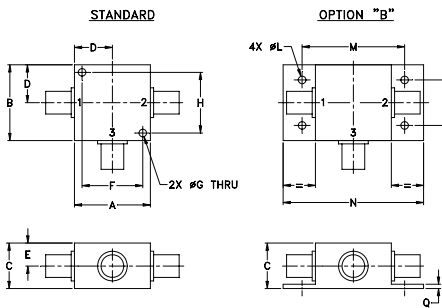
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.*
Internal Dissipation	0.125W max.

\* At low range frequency band ( $f_L$  to  $10 f_L$ ), linearly derate maximum input power by 13 dB typ.  
Permanent damage may occur if any of these limits are exceeded.

### Coaxial Connections

SUM PORT	3
PORT 1	1
PORT 2	2

### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
1.25	1.25	.75	.63	.38	1.00	.125	1.000
31.75	31.75	19.05	16.00	9.65	25.40	3.18	25.40

J	K	L	M	N	P	Q	wt
--	--	.125	1.688	2.18	.75	.07	grams
--	--	3.18	42.88	55.37	19.05	1.78	70.0

For option B with N-type connectors, dimension "C" increases to 0.94 inches.

### Features

- low insertion loss, 0.3 dB typ.
- excellent isolation, 30 dB typ.
- excellent amplitude unbalance, 0.1 dB typ.
- excellent phase unbalance, 0.2 deg. typ.
- rugged shielded case

### Applications

- HF
- ham radio
- defense communications

### Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION** (dB)			INSERTION LOSS (dB) ABOVE 3.0 dB			PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L	M	U	L	M	U	L	M	U	L	M	U
$f_L$ - $f_U$	Typ. Min.	Typ. Min.	Typ. Min.	Typ. Max.	Typ. Max.	Typ. Max.	Max.	Max.	Max.	Max.	Max.	Max.
0.002-60	27	20	30	20	27	20	0.3	0.6	0.3	0.6	0.6	1.0
							2	3	4	0.15	0.20	0.30

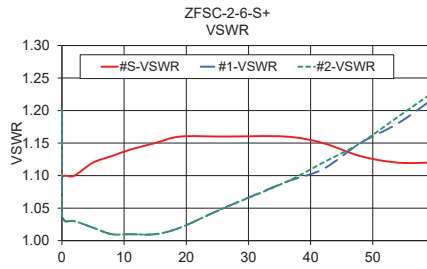
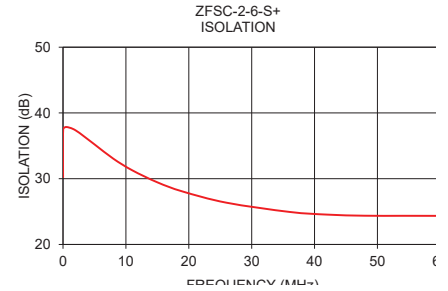
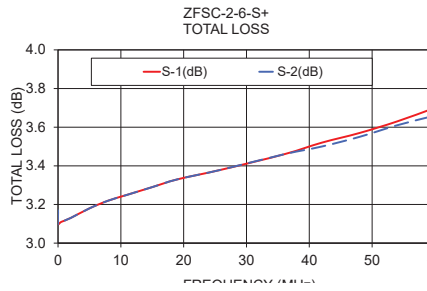
L = low range [ $f_L$  to  $10 f_L$ ] M = mid range [ $10 f_L$  to  $f_U/2$ ] U = upper range [ $f_U/2$  to  $f_U$ ]

\*\* Isolation specified to 0.006 MHz

### Typical Performance Data

Frequency (MHz)	Total Loss <sup>1</sup> (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
0.002	3.16	3.17	0.00	30.24	0.10	1.14	1.20	1.20
0.02	3.10	3.10	0.00	37.52	0.05	1.10	1.04	1.04
0.51	3.11	3.11	0.00	37.86	0.06	1.10	1.03	1.03
2.00	3.13	3.13	0.00	37.35	0.06	1.10	1.03	1.03
5.00	3.18	3.18	0.00	35.22	0.06	1.12	1.02	1.02
8.00	3.22	3.22	0.00	33.04	0.05	1.13	1.01	1.01
11.00	3.25	3.25	0.00	31.28	0.05	1.14	1.01	1.01
15.00	3.29	3.29	0.00	29.45	0.05	1.15	1.01	1.01
19.00	3.33	3.33	0.00	28.06	0.04	1.16	1.02	1.02
26.00	3.38	3.38	0.00	26.35	0.04	1.16	1.05	1.05
36.00	3.46	3.46	0.01	24.95	0.06	1.16	1.09	1.09
42.00	3.52	3.50	0.01	24.54	0.08	1.15	1.11	1.12
48.00	3.57	3.55	0.02	24.37	0.12	1.13	1.15	1.15
54.00	3.63	3.61	0.02	24.36	0.16	1.12	1.18	1.19
60.00	3.70	3.66	0.03	24.35	0.22	1.12	1.22	1.23

1. Total Loss = Insertion Loss + 3dB splitter loss.



### electrical schematic



### Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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