DC Pass

Power Splitter/Combiner

ZN8PD-642W+

8 Way-0° 50Ω 1800 to 6400 MHz

HT-Series Tight Spot SMA Wrench From $24.95

CASE STYLE: UU1676

Connectors	Model
SMA	ZN8PD-642W-S+

+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)	10W max.
Internal Dissipation	0.875W max.

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

Coaxial Connections

SUM PORT	S(COM)
PORT 1,2,3,.....,8	1,2,3.....,8

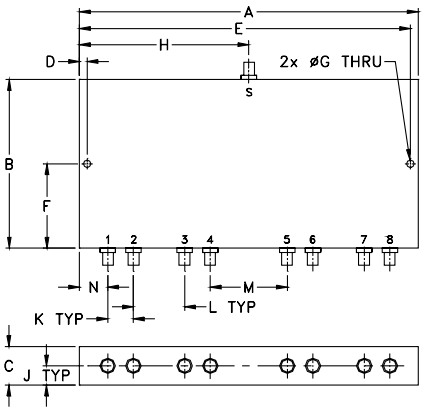
Features

- wideband, 1800 to 6400 MHz
- low insertion loss, 1.5 dB typ.
- low amplitude unbalance, 0.2 dB typ.
- excellent output VSWR, 1.15:1 typ.
- DC PASS from sum port to output ports

Applications

- high band PCS
- UNII
- WIMAX
- WiFi
- bluetooth

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F	G
6.60	3.28	.75	.150	6.45	1.64	.144
167.64	83.31	19.05	3.81	163.83	41.66	3.66
H	**J**	**K**	**L**	**M**	**N**	**wt**
3.30	.38	.500	1.000	1.500	0.550	grams
83.82	9.65	12.70	25.4	38.1	13.97	360

Electrical Schematic

Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		1800		6400	MHz
Insertion Loss (above theoretical 9.0 dB)	1800-3200	—	0.9	1.4	dB
	3200-6400	—	1.5	2.3	
Isolation	1800-3200	15	20	—	dB
	3200-6400	18	25	—	
Phase Unbalance	1800-3200	—	2	8	Degree
	3200-6400	—	5	12	
Amplitude Unbalance	1800-3200	—	0.15	0.5	dB
	3200-6400	—	0.30	0.7	
VSWR (Port S)	1800-3200	—	1.4	—	:1
	3200-6400	—	1.2	—	
VSWR (Port 1-8)	1800-3200	—	1.15	—	:1
	3200-6400	—	1.15	—	

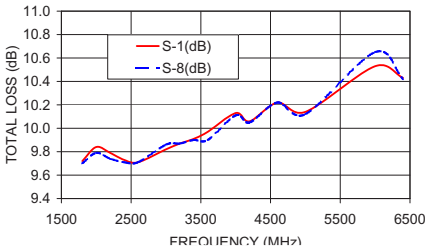
1. Over -55°C to +55°C. Derate linearly to 20% of rating at 100°C

Typical Performance Data

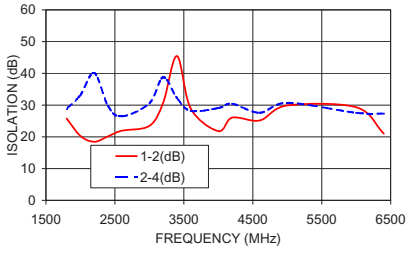
Freq. (MHz)	Total Loss[1] (dB)						Amp. Unb. (dB)	Isolation (dB)				Phase Unb. (deg.)	VSWR S	VSWR 1	VSWR 8
	S-1	S-2	S-3	S-4	S-6	S-8		1-2	1-3	3-4	5-6				
1800	9.72	9.67	9.66	9.64	9.77	9.70	0.16	25.78	28.68	26.43	24.46	1.73	1.39	1.18	1.19
2000	9.84	9.80	9.83	9.81	9.92	9.79	0.13	20.29	33.24	20.60	19.95	1.89	1.50	1.13	1.15
2200	9.79	9.77	9.74	9.72	9.81	9.74	0.14	18.45	40.43	18.75	18.57	1.44	1.39	1.03	1.09
2400	9.73	9.74	9.70	9.66	9.80	9.71	0.15	20.16	29.69	19.86	19.97	1.49	1.19	1.09	1.07
2600	9.71	9.75	9.73	9.71	9.83	9.71	0.12	21.93	26.40	21.99	22.22	1.40	1.12	1.06	1.04
3000	9.82	9.87	9.88	9.84	9.99	9.86	0.17	23.46	30.50	23.32	23.43	1.64	1.20	1.12	1.11
3200	9.87	9.90	9.90	9.86	9.99	9.87	0.13	30.75	38.89	28.89	29.31	2.00	1.19	1.04	1.07
3400	9.91	9.91	9.90	9.88	10.03	9.90	0.16	45.47	32.14	35.75	37.68	2.11	1.26	1.05	1.02
3600	9.97	9.97	9.95	9.96	10.03	9.90	0.13	28.90	28.38	27.91	28.25	2.21	1.29	1.01	1.03
4000	10.13	10.19	10.24	10.28	10.34	10.11	0.28	21.81	29.25	20.71	20.89	2.25	1.22	1.21	1.12
4200	10.06	10.14	10.15	10.13	10.23	10.05	0.20	26.07	30.25	24.95	23.54	2.48	1.28	1.13	1.07
4600	10.22	10.27	10.19	10.13	10.30	10.22	0.18	25.17	27.39	23.49	25.46	3.48	1.24	1.14	1.05
5000	10.14	10.17	10.16	10.12	10.35	10.12	0.24	29.89	30.66	32.53	29.80	4.17	1.11	1.16	1.11
6000	10.53	10.56	10.49	10.39	10.78	10.65	0.38	29.32	27.33	29.76	29.12	5.23	1.21	1.17	1.15
6400	10.43	10.46	10.48	10.49	10.59	10.42	0.23	21.01	27.28	20.87	21.95	5.65	1.11	1.22	1.11

1. Total Loss = Insertion Loss + 9dB theoretical splitter loss.

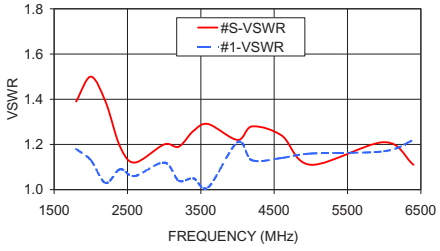
ZN8PD-642W+
TOTAL LOSS



ZN8PD-642W+
ISOLATION



ZN8PD-642W+
VSWR



Notes

A. 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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