



ZAPD-1-SMA

DC Pass power splitter/combiner
UHF 1000-2000 MHz



The ZAPD-1-SMA is a DC pass power splitter or combiner suitable for UHF applications utilising the 1000-2000 MHz frequency range.

Coaxial cable assemblies, adaptors, antennas and other RF solutions are all available separately.

Key features:

- DC pass through
- Wide bandwidth
- Low insertion loss
- Excellent phase and amplitude balance

Electrical specifications

Frequency range	1000-2000 MHz - GPS, Satellite communications, PCS/DCS compatible
Bandwidth	Full frequency range stated - 1000 MHz
Insertion loss	0.25dB - typical
Isolation	25dB - typical
Amplitude unbalance	0.1dB - typical
Phase unbalance	0.5 deg - typical
Maximum input power	10 Watts - as a splitter
VSWR	1.1:1 - Typical
Impedance	50 Ohms
Internal dissipation	0.125W - maximum
DC voltage	25V - maximum
DC current	800mA (400mA per port)

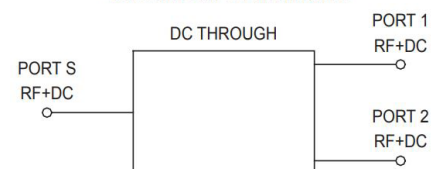
Mechanical specifications

Construction	Rugged aluminium outer body and tri-metal plated terminations
Connector	Output: N-type female jack Input: N-type female jack
Operating temperature	-55°C to +100°C
Storage temperature	-55°C to +100°C
Dimensions	Length: 50.8mm, Width: 50.8mm, Height: 19.05mm
Weight	170grams
Mounting position	Mount utilising the 2 x 3.18mm holes through the body



ZAPD-2DC-N

electrical schematic





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Electrical Specifications

Frequency Range (MHz) $f_1 - f_2$	Isolation (dB)		Insertion loss (dB) above 3.0dB		Phase unbalance (Degrees) - Max.	Amplitude unbalance (dB) - Max.	VSWR			
							S		Out	
	Typ.	Min.	Typ.	Min.			Typ.	Max.	Typ.	Max.
1000-2000	25	19	0.25	0.6	2	0.2	-	-	-	-

Typical Performance Data

Frequency Range (MHz)	Total Loss (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (degree)	VSWR		
	S-1	S-2				S	1	2
1000	3.26	3.24	0.02	20.82	0.14	1.26	1.07	1.08
1025	3.21	3.19	0.01	21.53	0.14	1.24	1.06	1.07
1075	3.22	3.21	0.01	22.97	0.12	1.21	1.05	1.06
1125	3.19	3.18	0.01	24.61	0.16	1.17	1.04	1.05
1175	3.22	3.20	0.02	26.54	0.13	1.15	1.03	1.03
1250	3.19	3.17	0.02	29.88	0.17	1.11	1.02	1.02
1325	3.22	3.20	0.02	34.41	0.15	1.08	1.02	1.02
1400	3.22	3.20	0.02	40.79	0.23	1.06	1.03	1.02
1475	3.21	3.17	0.04	48.01	0.27	1.06	1.03	1.02
1550	3.22	3.18	0.04	44.16	0.23	1.06	1.04	1.03
1650	3.25	3.21	0.04	40.64	0.23	1.07	1.05	1.04
1750	3.27	3.21	0.05	37.67	0.17	1.09	1.06	1.05
1850	3.26	3.21	0.05	33.14	0.22	1.12	1.07	1.07
1950	3.27	3.24	0.03	28.56	0.27	1.16	1.09	1.09
2000	3.29	3.23	0.06	26.55	0.20	1.19	1.09	1.10

Total loss = Insertion loss + 3dB splitter loss



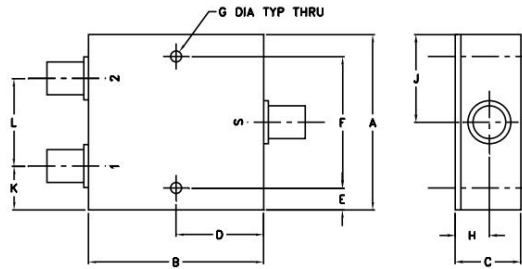
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Typical Performance Data

Outline Drawing



Outline Dimensions (inch mm)

A	B	C	D	E	F	G	
2.00	2.00	0.75	1.00	0.25	1.500	0.125	
50.80	50.80	19.05	25.40	6.35	38.10	3.18	
	H	J	K	L			wt
	0.39	1.00	0.50	1.00			grams
	9.91	25.40	12.70	25.40			170.0

