

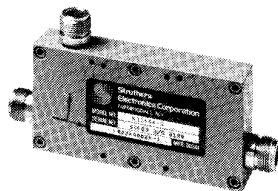
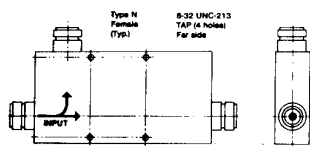
Miniature Coaxial Couplers Stripline/Octave Band/Series S9-164

- Small, Lightweight Designs • High Directivity, Low VSWR
- Full Octave Coverage • Operation to 105°C (125°C Storage)
- Meets MIL-C-15370 • Space Qualified Units Available

Series S9-164 Stripline Couplers offer superior performance coupled with a proven small lightweight design.

Model No	Frequency (GHz)	Coupling* (dB)	Frequency Sensitivity (dB)	Directivity (dB min.)	Insertion** Loss (dB max.)	VSWR (max)		Dimensions (Inches)							Diameter (Inches)			Weight (gm.)
						Primary	Secondary	A***	B***	C	D	E	F	G	X	Z		
S9-164PN-6	.25-.5	6 ± 1.0	± .60	25	.15	1:10	1:10	5 ¹ / ₁₆	3 ¹ / ₈	3 ¹ / ₈	NA	1 ¹ / ₃₂	1 ¹ / ₈	5	.104	NA	60	
S9-164PN-10	.25-.5	10 ± 1.25	± .75	25	.15	1:10	1:10	5 ¹ / ₁₆	3 ¹ / ₈	3 ¹ / ₈	NA	1 ¹ / ₃₂	1 ¹ / ₈	5	.104	NA	60	
S9-164PN-20	.25-.5	20 ± 1.25	± .75	25	.15	1:10	1:10	5 ¹ / ₁₆	3 ¹ / ₈	3 ¹ / ₈	NA	1 ¹ / ₃₂	1 ¹ / ₈	5	.104	NA	60	
S9-164PN-30	.25-.5	30 ± 1.25	± .75	25	.15	1:10	1:10	5 ¹ / ₁₆	3 ¹ / ₈	3 ¹ / ₈	NA	1 ¹ / ₃₂	1 ¹ / ₈	5	.104	NA	60	
S9-164HF-6	.5-1	6 ± 1.0	± .60	25	.15	1:10	1:10	3 ¹ / ₈	3 ¹ / ₈	1 ¹ / ₈	NA	1 ¹ / ₁₆	3 ¹ / ₈	2 ¹ / ₈	.104	NA	45	
S9-164HF-10	.5-1	10 ± 1.25	± .75	25	.15	1:10	1:10	3 ¹ / ₈	3 ¹ / ₈	1 ¹ / ₈	NA	1 ¹ / ₁₆	3 ¹ / ₈	2 ¹ / ₈	.104	NA	45	
S9-164HF-20	.5-1	20 ± 1.25	± .75	25	.15	1:10	1:10	3 ¹ / ₈	3 ¹ / ₈	1 ¹ / ₈	NA	1 ¹ / ₁₆	3 ¹ / ₈	2 ¹ / ₈	.104	NA	45	
S9-164HF-30	.5-1	30 ± 1.25	± .75	25	.15	1:10	1:10	3 ¹ / ₈	3 ¹ / ₈	1 ¹ / ₈	NA	1 ¹ / ₁₆	3 ¹ / ₈	2 ¹ / ₈	.104	NA	45	
S9-164LM-6	1-2	6 ± 1.0	± .60	25	.20	1:15	1:15	1 ¹ / ₁₆	1 ¹ / ₂	1 ¹ / ₁₆	NA	7 ¹ / ₁₆	3 ¹ / ₈	1 ¹ / ₂	.104	NA	22	
S9-164LM-10	1-2	10 ± 1.25	± .75	25	.20	1:15	1:15	1 ¹ / ₁₆	1 ¹ / ₂	1 ¹ / ₁₆	NA	7 ¹ / ₁₆	3 ¹ / ₈	1 ¹ / ₂	.104	NA	22	
S9-164LM-20	1-2	20 ± 1.25	± .75	25	.20	1:15	1:15	1 ¹ / ₁₆	1 ¹ / ₂	1 ¹ / ₁₆	NA	7 ¹ / ₁₆	3 ¹ / ₈	1 ¹ / ₂	.104	NA	22	
S9-164LM-30	1-2	30 ± 1.25	± .75	25	.20	1:15	1:15	1 ¹ / ₁₆	1 ¹ / ₂	1 ¹ / ₁₆	NA	7 ¹ / ₁₆	3 ¹ / ₈	1 ¹ / ₂	.104	NA	22	
S9-164MS-6	2-4	6 ± 1.0	± .60	22	.20	1:15	1:15	1 ¹ / ₃₂	1 ¹ / ₂	1 ¹ / ₃₂	NA	1 ¹ / ₃₂	1 ¹ / ₂	2 ¹ / ₃₂	.104	NA	15	
S9-164MS-10	2-4	10 ± 1.25	± .75	22	.20	1:15	1:15	1 ¹ / ₃₂	1 ¹ / ₂	1 ¹ / ₃₂	NA	1 ¹ / ₃₂	1 ¹ / ₂	2 ¹ / ₃₂	.104	NA	15	
S9-164MS-20	2-4	20 ± 1.25	± .75	22	.20	1:15	1:15	1 ¹ / ₃₂	1 ¹ / ₂	1 ¹ / ₃₂	NA	1 ¹ / ₃₂	1 ¹ / ₂	2 ¹ / ₃₂	.104	NA	15	
S9-164MS-30	2-4	30 ± 1.25	± .75	22	.20	1:15	1:15	1 ¹ / ₃₂	1 ¹ / ₂	1 ¹ / ₃₂	NA	1 ¹ / ₃₂	1 ¹ / ₂	2 ¹ / ₃₂	.104	NA	15	
S9-164SC-6	2.6-5.2	6 ± 1.0	± .60	20	.25	1:25	1:25	1	1 ¹ / ₂	NA	1 ¹ / ₂	NA	3 ¹ / ₈	1 ¹ / ₂	NA	.104	14	
S9-164SC-10	2.6-5.2	10 ± 1.25	± .75	20	.25	1:25	1:25	1	1 ¹ / ₂	NA	1 ¹ / ₂	NA	3 ¹ / ₈	1 ¹ / ₂	NA	.104	14	
S9-164SC-20	2.6-5.2	20 ± 1.25	± .75	20	.25	1:25	1:25	1	1 ¹ / ₂	NA	1 ¹ / ₂	NA	3 ¹ / ₈	1 ¹ / ₂	NA	.104	14	
S9-164SC-30	2.6-5.2	30 ± 1.25	± .75	20	.25	1:25	1:25	1	1 ¹ / ₂	NA	1 ¹ / ₂	NA	3 ¹ / ₈	1 ¹ / ₂	NA	.104	14	
S9-164CA-6	4-8	6 ± 1.0	± .60	18	.25	1:25	1:25	1	1 ¹ / ₂	NA	1 ¹ / ₂	NA	3 ¹ / ₈	1 ¹ / ₂	NA	.104	14	
S9-164CA-10	4-8	10 ± 1.25	± .75	20	.25	1:25	1:25	1	1 ¹ / ₂	NA	1 ¹ / ₂	NA	3 ¹ / ₈	1 ¹ / ₂	NA	.104	14	
S9-164CA-20	4-8	20 ± 1.25	± .75	20	.25	1:25	1:25	1	1 ¹ / ₂	NA	1 ¹ / ₂	NA	3 ¹ / ₈	1 ¹ / ₂	NA	.104	14	
S9-164CA-30	4-8	30 ± 1.25	± .75	20	.25	1:25	1:25	1	1 ¹ / ₂	NA	1 ¹ / ₂	NA	3 ¹ / ₈	1 ¹ / ₂	NA	.104	14	
S9-164BX-6	7-12.4	6 ± 1.0	± .50	15	.40	1:35	1:35	1	1 ¹ / ₂	NA	1 ¹ / ₂	NA	3 ¹ / ₈	1 ¹ / ₂	NA	.104	14	
S9-164BX-10	7-12.4	10 ± 1.25	± .50	17	.40	1:35	1:35	1	1 ¹ / ₂	NA	1 ¹ / ₂	NA	3 ¹ / ₈	1 ¹ / ₂	NA	.104	14	
S9-164BX-20	7-12.4	20 ± 1.25	± .50	17	.30	1:35	1:35	1	1 ¹ / ₂	NA	1 ¹ / ₂	NA	3 ¹ / ₈	1 ¹ / ₂	NA	.104	14	
S9-164BX-30	7-12.4	30 ± 1.25	± .50	17	.30	1:35	1:35	1	1 ¹ / ₂	NA	1 ¹ / ₂	NA	3 ¹ / ₈	1 ¹ / ₂	NA	.104	14	
S9-164XG-6	12.4-18	6 ± 1.0	± .50	12	.50	1:45	1:45	1	1 ¹ / ₂	NA	1 ¹ / ₂	NA	3 ¹ / ₈	1 ¹ / ₂	NA	.104	14	
S9-164XG-10	12.4-18	10 ± 1.25	± .50	12	.50	1:45	1:45	1	1 ¹ / ₂	NA	1 ¹ / ₂	NA	3 ¹ / ₈	1 ¹ / ₂	NA	.104	14	
S9-164XG-20	12.4-18	20 ± 1.25	± .50	12	.50	1:45	1:45	1	1 ¹ / ₂	NA	1 ¹ / ₂	NA	3 ¹ / ₈	1 ¹ / ₂	NA	.104	14	
S9-164XG-30	12.4-18	30 ± 1.25	± .50	12	.50	1:45	1:45	1	1 ¹ / ₂	NA	1 ¹ / ₂	NA	3 ¹ / ₈	1 ¹ / ₂	NA	.104	14	

*Coupling Value includes Frequency Sensitivity **Excluding Coupled Power ***Allow 1/32" extra for sealant build-up
Special configurations available. Please consult factory or your local Struthers representative for your application.



Airline Directional Couplers Full Octave/Series N166

- High Directivity • Full Octave Coverage
- Low VSWR • High Power • Severe Environmental Conditions

Series 166 Airline Couplers offer full octave coverage, along with high directivity. Primary and secondary center conductors are ruggedly designed to withstand severe shock and vibration. These couplers are ideally suited for leveling & power sampling applications.

Model No.	Frequency (GHz)	Mid-Frequency Coupling (dB)	Insertion* Loss (dB max.)	Directivity (dB Min.)	Frequency Sensitivity (db)	VSWR (max.)		Incident Power (watts)	Per MIL-C-15370/3
						(Pri.)	(Sec.)		
N166A-10	.225-.46	10	.2	30	±1	1:15	1:25	200	-001
N166A-20	.225-.46	20	.2	30	±1	1:15	1:25	500	-006
N166A-30	.225-.46	30	.2	30	±1	1:15	1:25	1000	-011
N166B-10	.46-.95	10	.2	30	±1	1:15	1:25	200	-017
N166B-20	.46-.95	20	.2	30	±1	1:15	1:25	500	-018
N166B-30	.46-.95	30	.2	30	±1	1:15	1:25	1000	
N166C-10	.95-2	10	.2	30	±1	1:15	1:15	200	-002
N166C-20	.95-2	20	.2	30	±1	1:15	1:15	500	-008
N166C-30	.95-2	30	.2	30	±1	1:15	1:15	1000	-012
N166D-10	2-4	10	.2	25	±1	1:15	1:25	200	-003
N166D-20	2-4	20	.2	25	±1	1:15	1:25	500	
N166D-30	2-4	30	.2	25	±1	1:15	1:25	1000	-013
N166E-10	4-10	10	.2	20	±1.25	1:20	1:30	200	-004
N166E-20	4-10	20	.2	20	±1.25	1:20	1:30	500	-010
N166E-30	4-10	30	.2	20	±1.25	1:20	1:30	1000	-014

*Excluding Coupled Power