

Bi-Directional Coupler

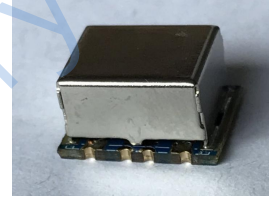
HT-SYDC-20-62HP

Features

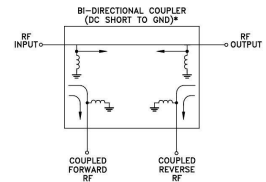
- wideband, 10 to 540 MHz
- low mainline loss, 0.2 dB typ.
- good return loss, 26 dB typ.
- high power handling, 25 Watt max.

Applications

- military mobile



50Ω 20 dB Coupling



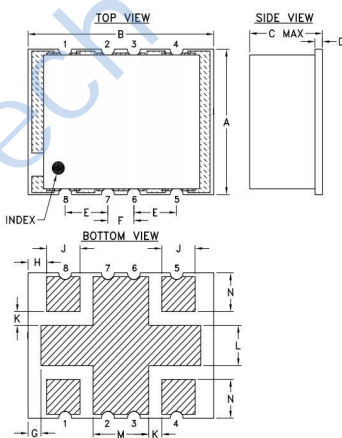
Transformer Electrical Specifications

Freq. range (MHz)	Mainline Loss		Nominal Coupling	Directivity		Return Loss
	Typ	max		Typ	max	
10-540	0.2	0.6	19.8±0.5	16	26	26

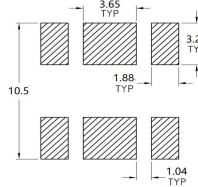
Typical Performance Data

Freq. (MHz)	Mainline Loss (dB) In-Out	Coupling(dB)		Directivity(dB)		Return Loss(dB)			
		in-cpl	out-cpl	out-cpl	in-cpl	In	Out	Cpl-Fwd	Cpl-Rev
10.0	0.08	20.20	20.14	27.39	27.16	24.12	24.24	23.90	23.97
50.0	0.15	20.26	20.16	47.58	47.12	35.06	35.95	33.45	33.81
100.0	0.16	20.28	20.19	34.70	43.72	35.11	35.24	32.06	31.68
150.0	0.17	20.26	20.20	30.36	36.64	34.22	34.18	30.65	29.81
200.0	0.18	20.21	20.20	27.57	33.63	33.40	32.58	29.07	28.15
250.0	0.19	20.15	20.18	25.43	31.10	32.59	31.71	27.53	26.81
350.0	0.21	19.95	20.10	22.53	26.74	30.67	29.41	25.30	24.70
400.0	0.23	19.83	20.04	21.54	25.36	30.25	28.81	24.24	23.73
500.0	0.25	19.49	19.87	19.74	21.71	28.06	26.60	22.44	22.13
540.0	0.27	19.34	19.75	18.90	20.49	27.68	26.47	21.81	21.46

Outline Drawing



PCB Land Pattern



Suggested L ayout, Tolerance to be within ±0.05mm

Pin Connections	
Input	8
Output	1
Forward	5
Reverse	4
Ground	2,3,6,7

Maximum Ratings

Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	25W max.

Case temperature is defined as temperature on ground leads.
Permanent damage may occur if any of these limits are exceeded.

Outline Dimensions: Unit (mm)

A	9.65	H	1.27
B	12.70	N	2.41
C	6.93	M	3.56
D	1.00	J	2.29
E	2.92	K	1.02
F	1.78	L	2.67
G	0.89	P	

