

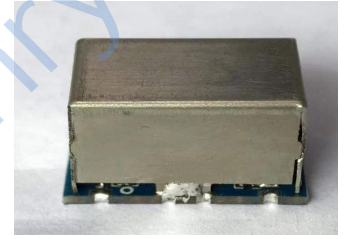
Features

- wideband, 10 to 600 MHz
- high power, 35 W max. with output load VSWR 2.0 max
- high power, 10 W max. with output open or short
- low mainline loss, 0.5 dB typ.
- good VSWR, 1.18 typ.

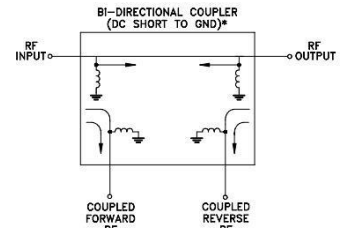
Applications

- military mobile

HT-SYDC-10-52VHP+

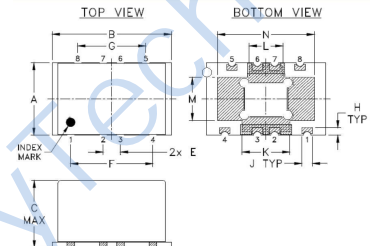


Electrical Schematic

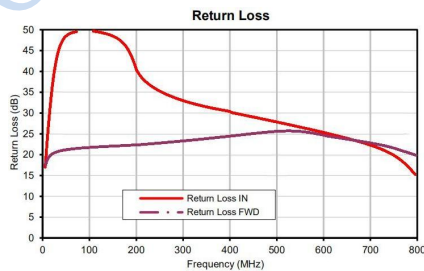
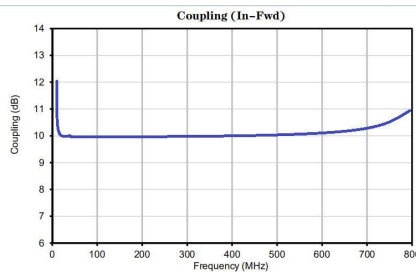
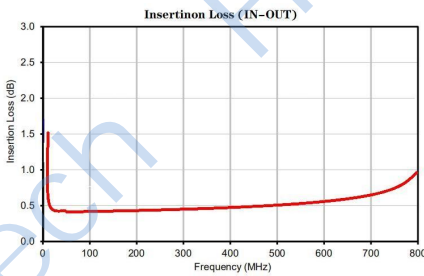


Outline Drawing

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



Typical Performance Data					
FREQUENCY (MHz)	Mainline Loss (dB) IN-OUT	Coupling (dB) In-Cpl Fwd	Return Loss (dB)		
			In	Cpl Fwd	
10.0	-0.476	-9.932	-30.958	-19.342	
100.0	-0.370	-9.937	-43.687	-19.921	
150.0	-0.373	-9.976	-41.138	-21.159	
200.0	-0.383	-10.008	-28.525	-22.258	
250.0	-0.427	-10.026	-24.858	-21.808	
300.0	-0.477	-10.129	-25.413	-21.290	
400.0	-0.593	-10.193	-20.830	-25.248	
512.0	-0.798	-10.219	-18.327	-29.006	
600.0	-0.781	-10.226	-19.189	-24.495	



Maximum Ratings

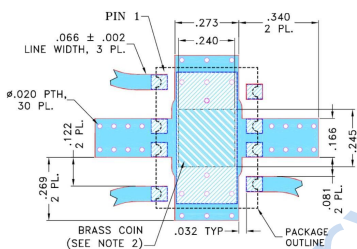
Operating Temperature -40°C to 80°C

Storage Temperature -40°C to 100°C

RF Power 35W

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

PCB Layout

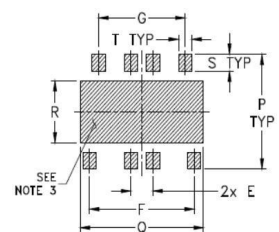


NOTES:

1. TRACE WIDTH IS SHOWN FOR ROGERS R04350B WITH DIELECTRIC THICKNESS .050" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. SUGGEST TO PROVIDE BRASS COIN FOR BETTER HEAT TRANSFER FROM THE UNIT. OTHERWISE PROVIDE ARRAY OF THERMAL VIAS ADEQUATE TO LIMIT TEMPERATURE OF GROUND CONNECTIONS UNDER THE UNIT TO 65°C.
3. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK) OVER BARE COPPER
- DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK
- DENOTES BRASS COIN.

PCB Land Pattern



Dimensions are in metric (mm)					
A	B	C	E	F	G
11.0	17.53	10.54	2.54	12.09	10.01
H	J	K	L	M	N
1.14	1.52	7.01	4.93	6.53	14.22
P	Q	R	S	T	
12.07	14.25	6.55	1.75	1.55	