

Features

- isolation resistor, external 100 ohms
- low insertion loss, 0.4 dB typ.
- excellent amplitude unbalance, 0.2 dB typ.
- excellent phase unbalance, 1.5 deg. typ.
- high isolation, 25 dB typ.
- excellent power handling, 20W as splitter
- small size, 0.12"×0.06"×0.035"
- ESD non-sensitive
- temperature stable LTCC technology
- wrap around terminations for excellent solderability
- low cost

Applications

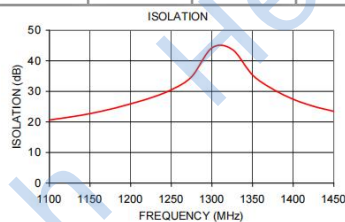
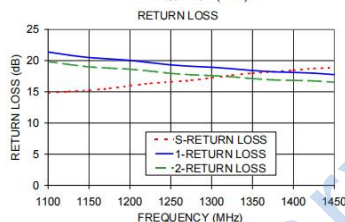
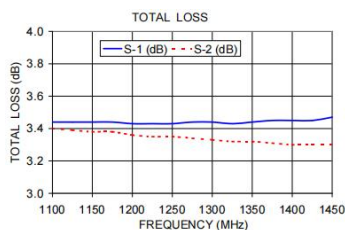
- Satellite distribution
- GPS

Electrical Specifications at 25°C Co

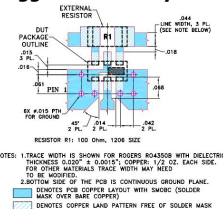
Parameter	Frequency(MHz)	Min.	Typ.	Max.	Unit
Frequency Range		1100		1450	MHz
Insertion Loss, above 3.0 dB	1100-1450 1200-1375		0.5 0.4	0.8 0.7	dB
Isolation	1100-1450 1200-1375	17 20	23 25		dB
Phase Unbalance	1100-1450 1200-1375		1.5 1.5	3.0 3.0	Degree
Amplitude Unbalance	1100-1450 1200-1375		0.25 0.20	0.4 0.3	dB
Return Loss (Input)	1100-1450 1200-1375		15.0 17.5		dB
Return Loss (Output)	1100-1450 1200-1375		16 18		dB

TYPICAL PERFORMANCE DATA

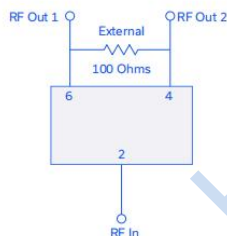
Frequency (MHz)	Insertion Loss (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	Return Loss (dB)		
	S-1	S-2				S	1	2
1100	3.44	3.40	0.04	20.64	0.93	14.81	21.38	19.84
1125	3.44	3.39	0.05	21.59	0.94	15.05	20.89	19.39
1150	3.44	3.38	0.06	22.71	0.95	15.24	20.50	19.00
1175	3.44	3.38	0.06	24.17	0.97	15.54	20.27	18.79
1200	3.43	3.36	0.07	25.92	1.01	15.97	20.03	18.62
1225	3.43	3.35	0.08	27.91	1.02	16.34	19.67	18.31
1250	3.43	3.35	0.08	30.52	1.05	16.58	19.32	17.96
1275	3.44	3.34	0.10	34.80	1.07	16.85	19.09	17.72
1300	3.44	3.33	0.11	44.22	1.10	17.25	18.93	17.59
1325	3.43	3.32	0.11	43.71	1.11	17.66	18.69	17.39
1350	3.44	3.32	0.12	35.34	1.15	17.97	18.41	17.12
1375	3.45	3.31	0.14	30.72	1.17	18.20	18.21	16.91
1400	3.45	3.30	0.15	27.43	1.18	18.46	18.11	16.83
1425	3.45	3.30	0.15	25.13	1.20	18.73	17.98	16.74
1450	3.47	3.30	0.17	23.47	1.25	18.83	17.75	16.53



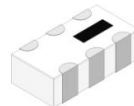
Suggested PCB Layout



ELECTRICAL SCHEMATIC



HT-SCN-2-15+



2 Way-0° 50Ω 1100 to 1450 MHz

Maximum Ratings

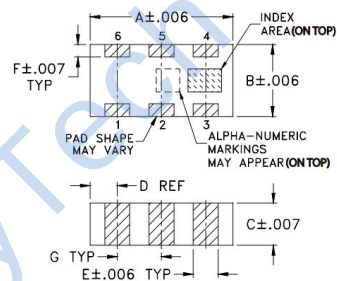
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	20W* max

*Derate linearly to 6W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

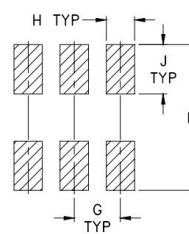
Pin Connections

SUM PORT	2
PORT 1	6
PORT 2	4
GROUND	1,3,5
PORT 1-2	resistor external 100 OHMS

Outline Drawing



PCB Land Pa ttern



Suggested Layout
Tolerance to be within ± 0.02

Outline Dimensions: Unit ([mm](#))

A	3.20	B	1.60	C	0.89
D	0.61	E	0.56	F	0.28
G	0.99	H	0.61	J	1.07
K	3.12	wt	0.02g		