

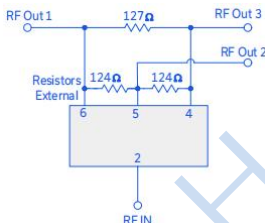
Features

- isolation resistor, external 100 ohms
- low insertion loss, 0.6 dB typ.
- excellent amplitude unbalance, 0.2 dB typ.
- excellent phase unbalance, 3 deg. typ.
- high isolation, 15 dB typ.
- excellent power handling, 15W 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

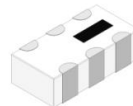
Applications

- DSS
- GSM, GPS
- WLAN
- ISM applications
- Satellite communication
- Defense applications
- Line of sight communications

electrical schematic



HT-SCN-3-16+



2 Way-0° 50Ω 950 to 1600 MHz

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	15W max. at 25°C

*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	5
PORT 3	4
GROUND	1,3
PORT 1-2 ,2-3	resistor external 124 OHMS
PORT 1-3	resistor external 127 OHMS

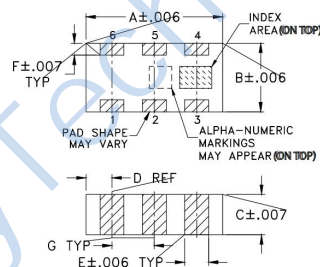
Electrical Specifications at 25°C

Parameter	Frequency(MHz)	Min.	Typ.	Max.	Unit
Frequency Range		950		1600	MHz
Insertion Loss, above 3.0 dB	950-1600		0.6	1.2	dB
	1200-1400		0.3	0.8	
Isolation	950-1600	11	15		dB
	1200-1400	14	20		
Phase Unbalance	950-1600		3.0	5.0	Degree
	1200-1400		2.0	5.0	
Amplitude Unbalance	950-1600		0.2	0.5	dB
	1200-1400		0.2	0.4	
Return Loss (Input)	950-1600		14		dB
	1200-1400		20		
Return Loss (Output)	750-1325		17		dB
	850-1000		19		

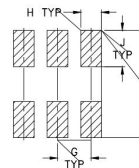
TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	Return Loss (dB)		
	S-1	S-2				S	1	2
950.00	5.42	5.34	0.08	13.32	1.94	11.10	21.04	19.70
1000.00	5.37	5.29	0.08	13.99	2.02	11.91	21.04	20.18
1050.00	5.32	5.24	0.08	14.75	2.12	12.81	20.79	20.41
1100.00	5.28	5.19	0.09	15.64	2.21	13.90	20.24	20.37
1150.00	5.24	5.15	0.09	16.70	2.32	15.20	19.62	19.96
1200.00	5.21	5.12	0.09	17.95	2.42	16.68	19.07	19.59
1250.00	5.19	5.11	0.10	19.50	2.53	18.37	18.56	19.14
1300.00	5.19	5.10	0.10	21.43	2.61	19.89	18.26	18.75
1350.00	5.20	5.11	0.11	23.85	2.66	20.36	18.11	18.57
1400.00	5.23	5.14	0.11	26.57	2.77	19.18	18.14	18.49
1450.00	5.29	5.19	0.11	27.77	2.89	17.07	18.44	18.78
1500.00	5.37	5.28	0.12	25.76	2.91	14.81	19.03	19.18
1550.00	5.48	5.40	0.12	22.72	2.94	12.80	20.12	20.07
1600.00	5.64	5.56	0.12	20.10	2.99	11.01	21.67	21.69

Outline Drawing



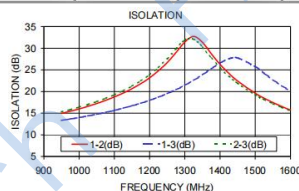
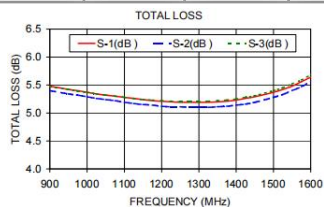
PCB Land Pattern



Suggested Layout
Tolerance to be within ±0.05

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



Suggested PCB Layout

