

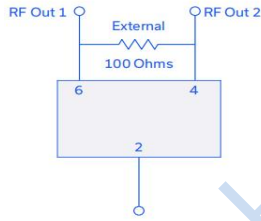
Features

- isolation resistor, external 100 ohms
- low insertion loss
- excellent amplitude unbalance
- temperature stable
- high isolation
- excellent power handing, 20W as splitter
- Temperature stable LTCC technology

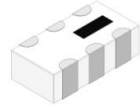
Applications

- GPS
- PCN

ELECTRICAL SCHEMATIC



HT-SCN-2-19+



2 Way-0° 50Ω 1425 to 1900 MHz

Electrical Specifications at 25°C

Parameter	Frequency(MHz)	Min.	Typ.	Max.	Unit
Frequency Range		1425		1900	MHz
Insertion Loss, above 3.0 dB	1425-1900 1550-1800		0.5 0.5	0.9 0.9	dB
Isolation	1425-1900 1550-1800	17 20	23 25		dB
Phase Unbalance	1425-1900 1550-1800		2.5 2.0	4.0 4.0	Degree
Amplitude Unbalance	1425-1900 1550-1800		0.25 0.2	0.4 0.4	dB
Return Loss (Input)	1425-1900 1550-1800		15 19		dB
Return Loss (Output)	1425-1900 1550-1800		18 18		dB

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.

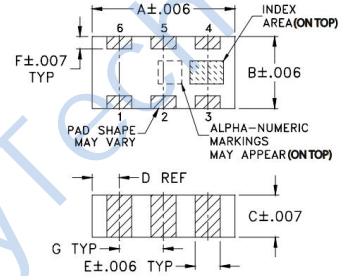
Pin Connections

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

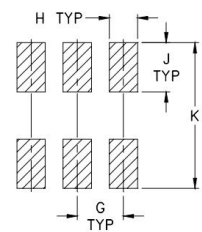
TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	Return Loss (dB)	
	S-1	S-2				S	1 2
1425	3.46	3.44	0.02	19.16	0.79	14.18	22.49 21.29
1450	3.46	3.43	0.02	19.76	0.80	14.44	22.04 20.91
1500	3.45	3.42	0.04	21.22	0.83	14.77	21.40 20.21
1525	3.45	3.40	0.03	22.26	0.82	15.10	21.32 20.15
1550	3.44	3.39	0.05	23.29	0.81	15.47	21.07 19.97
1600	3.44	3.38	0.05	25.56	0.85	15.99	20.37 19.24
1625	3.44	3.37	0.06	27.34	0.86	16.67	20.30 19.16
1650	3.44	3.36	0.07	29.60	0.87	16.31	20.25 19.15
1700	3.44	3.34	0.09	35.62	0.93	16.75	19.76 18.62
1725	3.44	3.33	0.10	42.32	0.95	17.48	19.63 18.44
1750	3.44	3.32	0.11	44.21	0.93	18.32	19.69 18.45
1800	3.44	3.31	0.12	32.86	0.96	19.18	19.36 19.17
1825	3.45	3.31	0.13	29.78	0.99	19.60	19.24 17.98
1850	3.45	3.30	0.14	27.19	1.00	20.10	19.32 18.02
1900	3.46	3.29	0.17	23.89	1.02	20.74	19.24 18.00

Outline Drawing



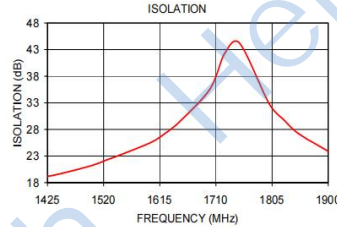
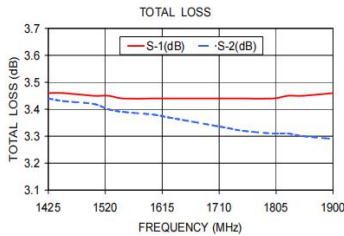
PCB Land Pattern



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



Suggested PCB Layout

