

Power Splitter/Combiner

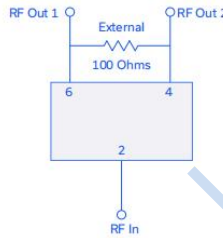
Features

- industry leading combination of size/power handling
- isolation resistor, external 100 ohms
- low insertion loss, 0.5 dB typ.
- high isolation, 15 dB typ.
- small size, 0.12"×0.06"×0.035"
- ESD non-sensitive
- temperature stable LTCC technology
- wrap around terminations for excellent solderability
- low cost

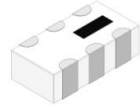
Applications

- GSM
- ISM
- Cellular
- LTE

ELECTRICAL SCHEMATIC



HT-SCN-2-10+



2 Way-0° 50Ω 600 to 1000 MHz

Electrical Specifications at 25°C

Parameter	Frequency(MHz)	Min.	Typ.	Max.	Unit
Frequency Range		600	-	1000	MHz
Insertion Loss, above 3.0 dB	600-1000	-	0.5	1.3	dB
Isolation	600-1000	11	15	-	dB
Phase Unbalance	600-1000	-	1.7	3.0	Degree
Amplitude Unbalance	600-1000	-	0.1	0.4	dB
Return Loss (Input)	600-1000	9.5	14	-	dB
Return Loss (Output)	600-1000	14	19	-	dB

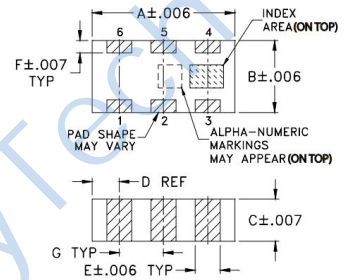
TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	Return Loss (dB)	
	S-1	S-2				S	2
600	3.50	3.46	0.04	14.77	0.44	1.39	1.12
660	3.47	3.43	0.04	17.19	0.54	1.30	1.10
700	3.46	3.42	0.04	19.29	0.62	1.24	1.09
740	3.44	3.40	0.04	22.01	0.68	1.18	1.09
780	3.44	3.40	0.04	25.60	0.76	1.11	1.09
800	3.44	3.40	0.04	27.52	0.79	1.08	1.09
840	3.45	3.40	0.05	28.21	0.86	1.03	1.10
860	3.46	3.41	0.05	26.38	0.89	1.04	1.10
900	3.48	3.43	0.05	22.30	0.96	1.10	1.11
920	3.50	3.45	0.05	20.58	1.00	1.14	1.11
940	3.52	3.46	0.05	19.08	1.03	1.18	1.11
960	3.54	3.49	0.06	17.75	1.07	1.23	1.12
1000	3.60	3.54	0.06	15.48	1.12	1.33	1.12

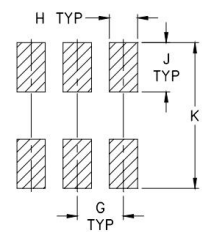
Maximum Ratings	
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	1W* max
*Permanent damage may occur if any of these limits are exceeded.	

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

Outline Drawing

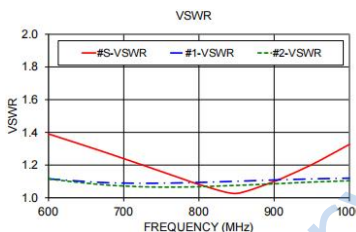
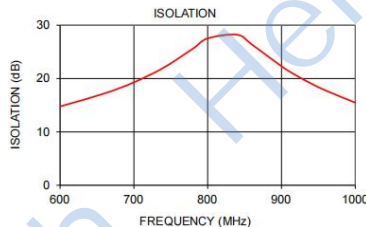
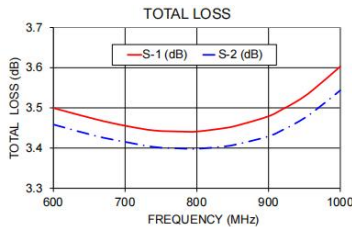


PCB Land Pattern



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

