

RF Transformer

50Ω 2300 to 2700 MHz

NCS4-272+



CASE STYLE: GE0805C-1

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications



Available Tape and Reel at no extra cost

Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500, 1000, 2000

Maximum Ratings

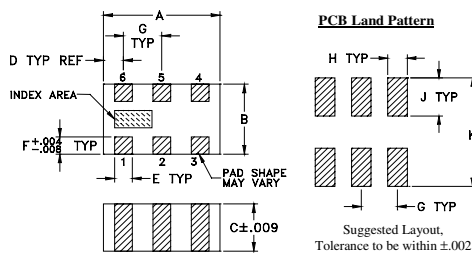
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Input RF Power***	3W
*** Derate linearly to 2W at 85°C	
Permanent damage may occur if any of these limits are exceeded.	

Pad Connections

PRIMARY DOT (Unbalanced Port)	1
PRIMARY (GND)	2
SECONDARY DOT (Balanced)	4
SECONDARY (Balanced)	3
NO CONNECTION	6
NOT USED (GND Externally)	5

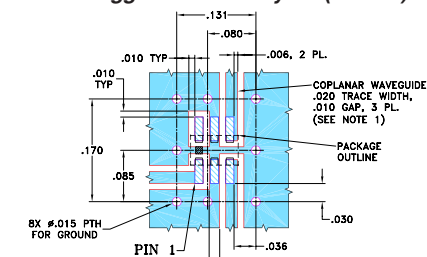
Pads 2,3,4 are DC-connected internally

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F
.079	.049	.033	.014	.012	.012
2.01	1.24	0.84	0.36	0.30	0.30
G	H	J	K	wt	
.026	.014	.039	.110	grams	
0.66	0.36	1.00	2.80	.008	

Demo Board MCL P/N: TB-419+
Suggested PCB Layout (PL-264)

Features

- wideband, 2300 to 2700 MHz
- low phase unbalance 5 deg. and amplitude unbalance, 0.3 dB typ.
- miniature size, 0.079"x0.049"x0.033"
- LTCC construction
- low cost
- aqueous washable

Applications

- WLAN
- WIMAX/WIBRO
- MMD
- radar

Electrical Specifications (T_{AMB} = 25°C)

Ω RATIO (Secondary/Primary)	FREQUENCY (MHz)	INSERTION* LOSS (dB)	PHASE UNBALANCE AT SECONDARY† (Deg.) Typ.	AMPLITUDE UNBALANCE (dB) Typ.
4	2300-2700	1.0	5	0.3

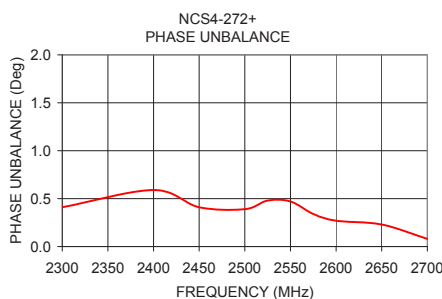
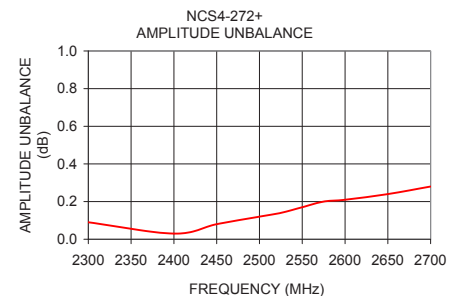
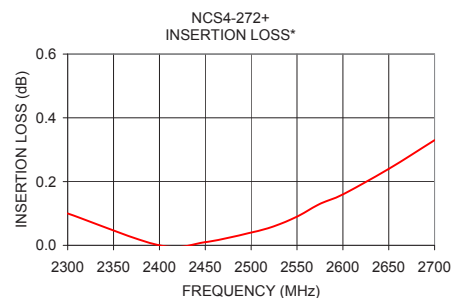
* Insertion Loss is referenced to mid-band loss, 0.7 dB. Reference Demo Board TB-419+

† Relative to 180°

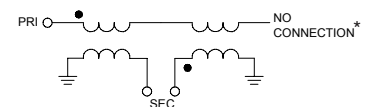
Typical Performance Data**

FREQUENCY (MHz)	INSERTION LOSS* (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
2300.00	0.10	16.96	0.09	0.41
2400.00	0.00	25.02	0.03	0.59
2450.00	0.01	23.15	0.08	0.41
2500.00	0.04	19.33	0.12	0.39
2525.00	0.06	17.78	0.14	0.48
2550.00	0.09	16.48	0.17	0.47
2575.00	0.13	15.42	0.20	0.34
2600.00	0.16	14.50	0.21	0.27
2650.00	0.24	12.99	0.24	0.23
2700.00	0.33	11.81	0.28	0.08

** Measured with Agilent E5071B network analyzer using impedance conversion and port extension.



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www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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