

RF Transformer

50Ω 2250 to 2725 MHz

NCS3-272+



CASE STYLE: GE0805C-1

Maximum Ratings

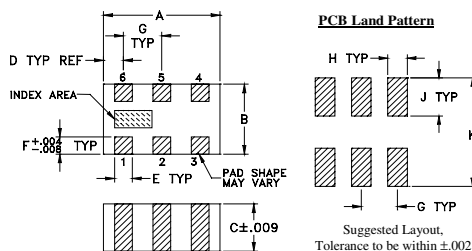
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Input RF Power***	3W
*** Derate linearly to 2W at 85°C	
Permanent damage may occur if any of these limits are exceeded.	

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

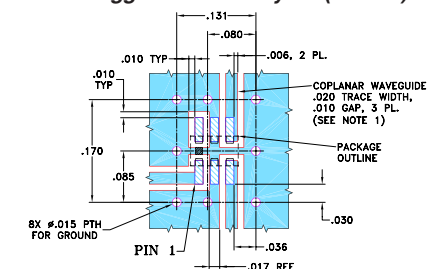
Pads 2,3,4 are DC-connected internally

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, 2250 to 2725 MHz
- low phase unbalance, 3 deg. and amplitude unbalance, 0.4 dB typ.
- miniature size, 0.079"x0.049"x0.033"
- LTCC construction
- low cost
- aqueous washable

Applications

- WLAN
- WIMAX/WIBRO
- MMDS
- 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.
3	2250-2725	1.0	3	0.4

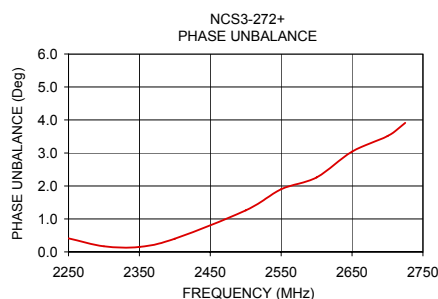
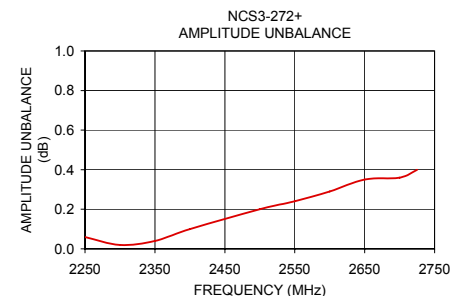
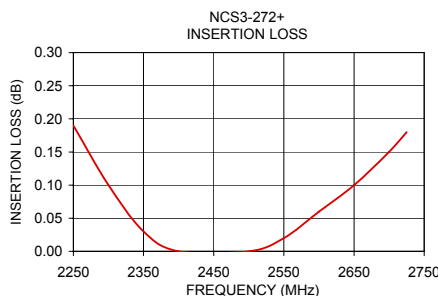
* Insertion Loss is referenced to mid-band loss, 0.6 dB. Reference Demo Board TB-419+

† Relative to 180°

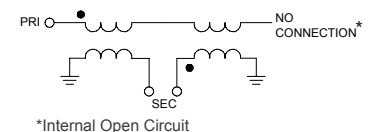
Typical Performance Data at 25°C**

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
2250.00	0.19	14.44	0.06	0.41
2300.00	0.10	17.15	0.02	0.17
2350.00	0.03	20.87	0.04	0.15
2400.00	0.00	26.39	0.10	0.40
2500.00	0.00	25.73	0.20	1.26
2550.00	0.02	21.19	0.24	1.90
2600.00	0.06	18.34	0.29	2.26
2650.00	0.10	16.31	0.35	3.04
2700.00	0.15	14.79	0.36	3.51
2725.00	0.18	14.18	0.40	3.91

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



configuration J



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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