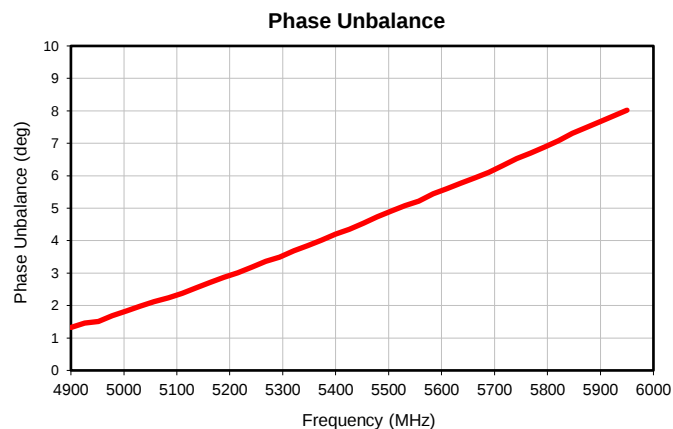
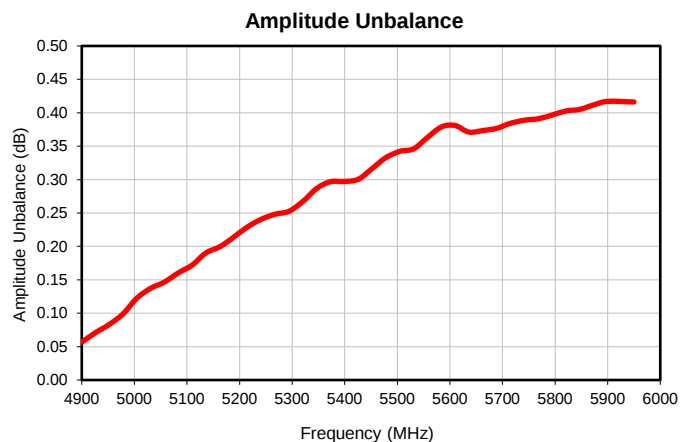
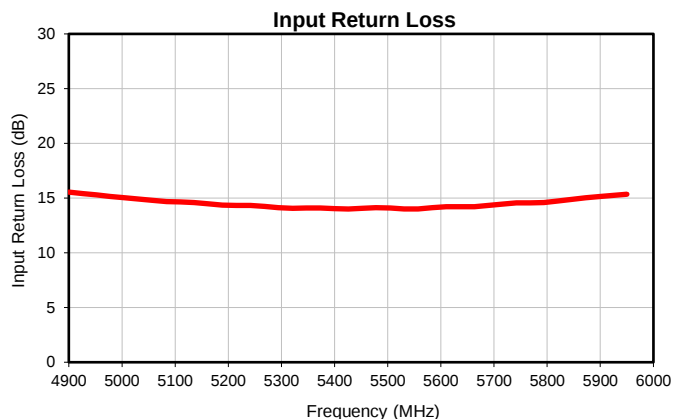
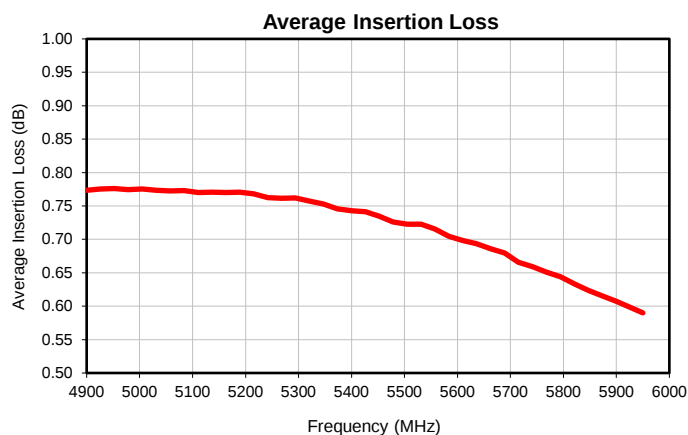


Typical Performance Data

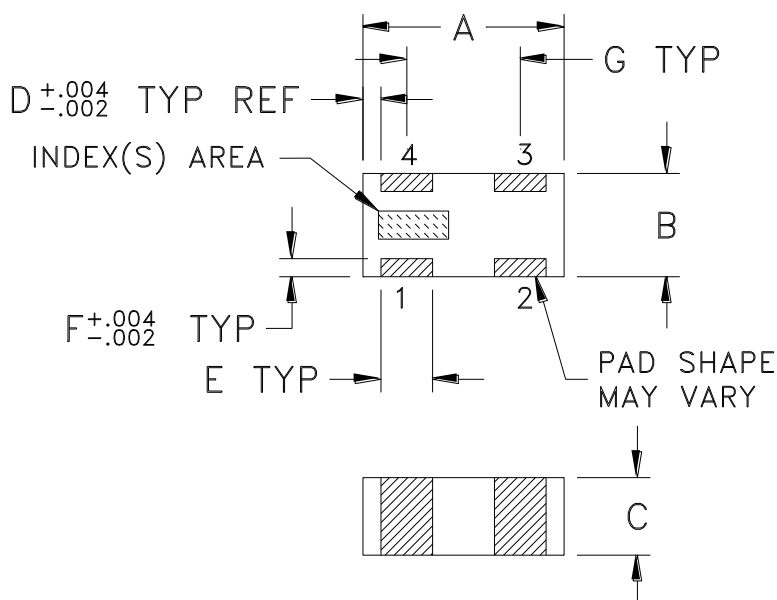
FREQUENCY (MHz)	AVERAGE INSERTION LOSS (dB)	INPUT RETURN LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE ⁽¹⁾ (deg.)
4900	0.77	15.55	0.06	1.32
4926	0.78	15.42	0.07	1.46
4952	0.78	15.29	0.08	1.51
4978	0.77	15.15	0.10	1.69
5005	0.78	15.02	0.12	1.83
5031	0.77	14.92	0.14	1.98
5057	0.77	14.80	0.15	2.12
5084	0.77	14.69	0.16	2.24
5110	0.77	14.64	0.17	2.38
5136	0.77	14.60	0.19	2.54
5163	0.77	14.47	0.20	2.71
5189	0.77	14.36	0.21	2.87
5215	0.77	14.32	0.23	3.00
5242	0.76	14.32	0.24	3.19
5268	0.76	14.24	0.25	3.37
5294	0.76	14.12	0.25	3.50
5321	0.76	14.07	0.27	3.69
5347	0.75	14.10	0.29	3.84
5373	0.75	14.11	0.30	4.02
5400	0.74	14.05	0.30	4.20
5426	0.74	14.00	0.30	4.35
5452	0.73	14.06	0.32	4.54
5478	0.73	14.13	0.33	4.73
5505	0.72	14.10	0.34	4.91
5531	0.72	14.02	0.35	5.08
5557	0.72	14.02	0.36	5.22
5584	0.70	14.12	0.38	5.45
5610	0.70	14.21	0.38	5.60
5636	0.69	14.22	0.37	5.77
5663	0.69	14.22	0.37	5.94
5689	0.68	14.34	0.38	6.10
5715	0.67	14.46	0.38	6.31
5742	0.66	14.55	0.39	6.53
5768	0.65	14.57	0.39	6.70
5794	0.64	14.60	0.40	6.88
5821	0.63	14.74	0.40	7.08
5847	0.62	14.89	0.41	7.31
5873	0.62	15.02	0.41	7.49
5900	0.61	15.16	0.42	7.67
5950	0.59	15.35	0.42	8.02

⁽¹⁾ Relative to 180°

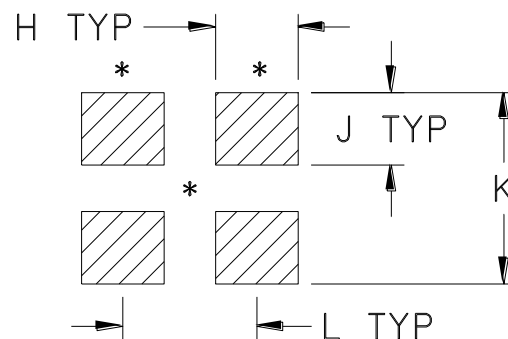
Typical Performance Data



Outline Dimensions



PCB Land Pattern



Suggested Layout,
Tolerance to be within $\pm .002$

CASE#	A	B	C	D	E	F	G	H	J	K	L	WT.GRAMS
NK0402C	.039 (1.00)	.020 (.50)	.015 (0.37)	.004 (0.10)	.010 (0.25)	.004 (0.10)	.022 (0.55)	.016 (0.41)	.014 (0.36)	.037 (0.94)	.026 (0.65)	.0007

Dimensions are in inches (mm). Tolerances: 2 Pl. $\pm .01$; 3 Pl. $\pm .005$

Notes:

1. Open style, ceramic base.
2. Termination finish:
For RoHS Case Styles: Matte Tin over Nickel plating. Models with (+) suffix.
3. *Line width should be designed to match 50 Ω characteristic impedance, depending on PCB material and thickness.



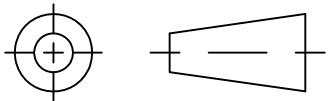
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

RF/IF MICROWAVE COMPONENTS

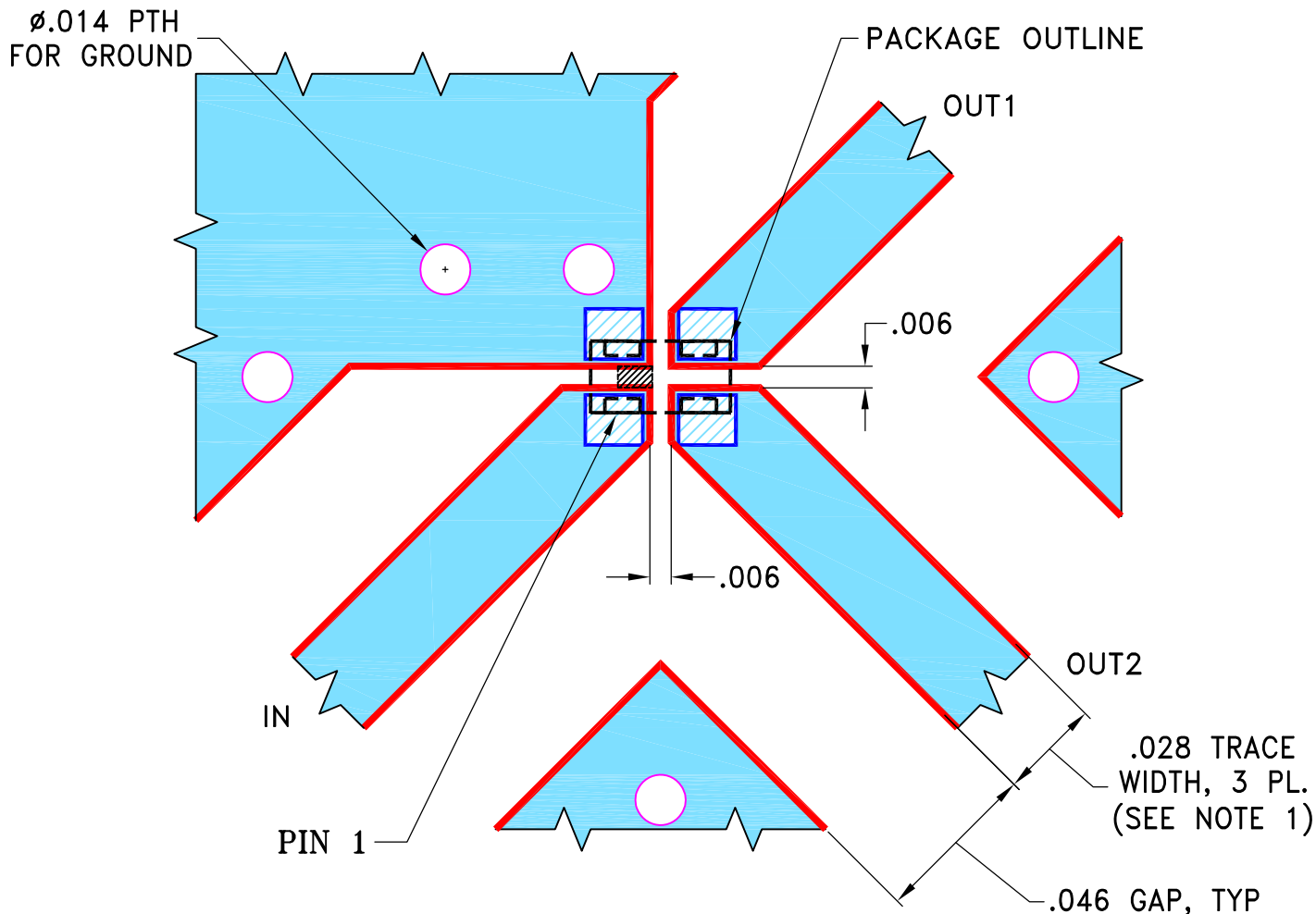
THIRD ANGLE PROJECTION



REVISIONS

REV	ECN No.	DESCRIPTION	DATE	DR	AUTH
OR	M173420	NEW RELEASE	03/26/19	ITG	SL

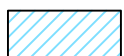
SUGGESTED MOUNTING CONFIGURATION
FOR NK0402C CASE STYLE, "04TG01" PIN CODE

**NOTES:**

1. TRACE WIDTH & GAP ARE SHOWN FOR FR4, GRADE IT-180TC (ITEQ CORP.) WITH DIELECTRIC THICKNESS $.016 \pm .0015$. COPPER: 1/2 OZ. EACH SIDE.
FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.



DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER).



DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK.

UNLESS OTHERWISE SPECIFIED

INITIALS

DATE

DIMENSIONS ARE IN INCHES

TOLERANCES ON:

2 PL DECIMALS $\pm$ 3 PL DECIMALS $\pm$.005ANGLES $\pm$ FRACTIONS $\pm$

DRAWN

ITG

03/22/19

CHECKED

GF

03/22/19

APPROVED

SL

03/26/19

**Mini-Circuits®**13 Neptune Avenue
Brooklyn NY 11235**PL, 04TG01, NK0402C, TB-1012-X542+**

SIZE

A

CODE IDENT

15542

DRAWING NO:

98-PL-624

REV:

OR

FILE:

98PL624

SCALE:

20:1

SHEET:

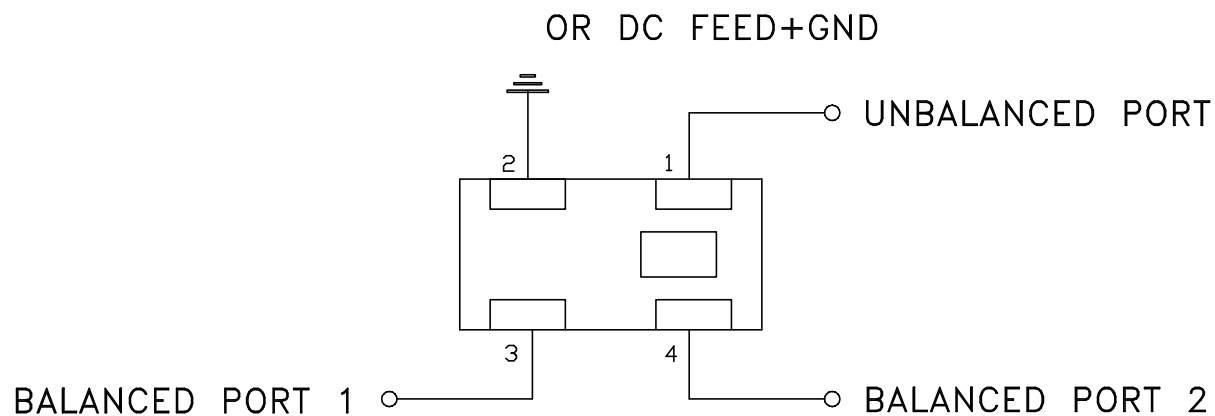
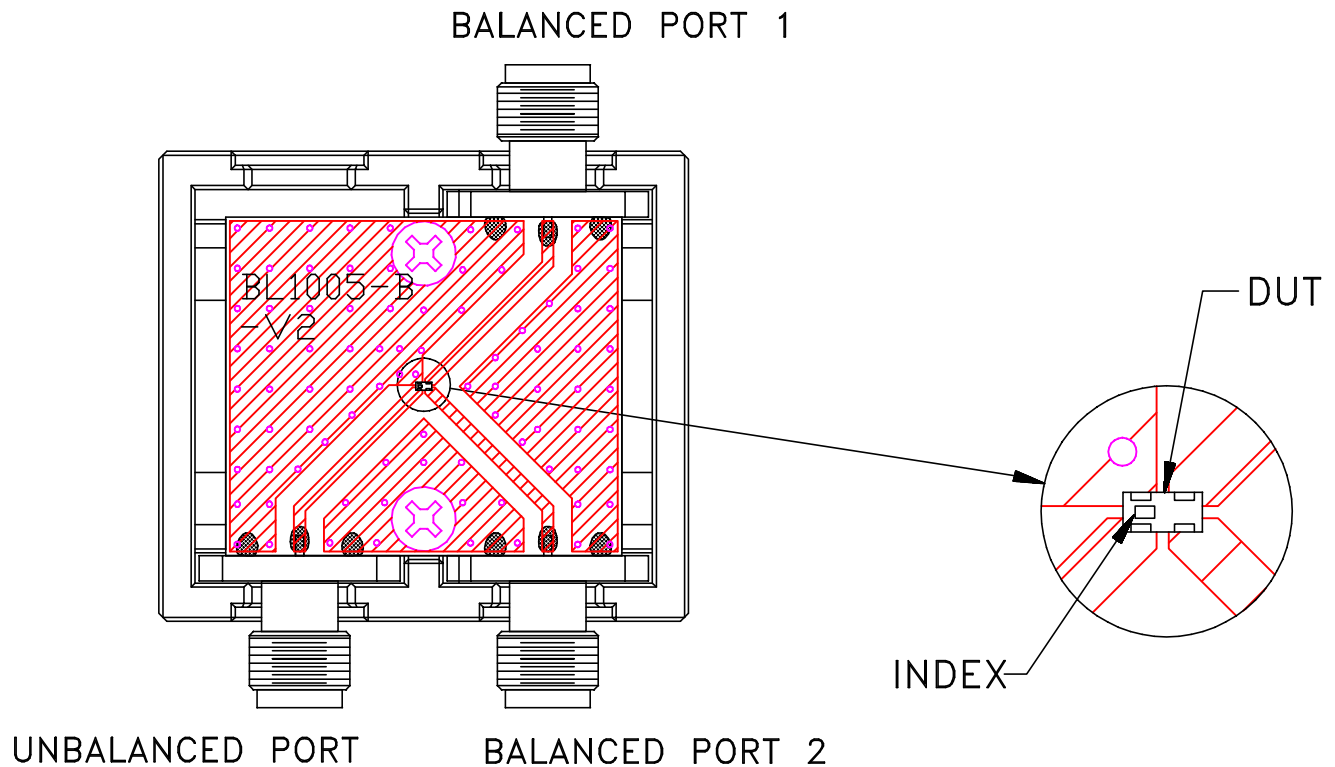
1 OF 1

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ASHEETA1.DWG REV:A DATE:01/12/95

Evaluation Board and Circuit



Schematic Diagram

Notes:

1. 50 Ohm SMA Female connectors.
2. PCB Material: FR4 or equivalent,
Dielectric Constant=4.5, Thickness=.016 inch.

 **Mini-Circuits®**



All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-40° to 85° C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-40° to 85° C Ambient Environment	Individual Model Data Sheet
Thermal Shock	-40° to 125°C, 100 cycles	MIL-STD-202 Method 107, Condition A-3 except -40°C instead of -55° C and +125° C instead of -85° C
Solder Reflow Heat	Pb-Free Process 245° -250°C peak,	J-STD-020, 4-2 and 5-2, Figure 5-1
Solderability	10X Magnification	J-STD-002, Para 4.2.5, Test S, 95% Coverage
Shelf Life	Shelf life is 12 months when kept in sealed bags. Unused parts are to be resealed to preserve shelf life for proper solderability.	