Surface Mount

RF Transformer

TC4-1W-17LN+

50Ω 100 to 500 MHz

CASE STYLE: AT224-1

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

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	0.25W
DC DWV	500V
DC Current (Primary)	0mA
DC Current (Secondary)	150mA*
Insulation Resistance Pri to Sec	1M Ohms

*Applied through center tap, equal current to secondary dot & secondary.

Permanent damage may occur if any of these limits are exceeded.

Features

- wideband, 100 to 500 MHz
- good return loss
- plastic base with leads
- aqueous washable

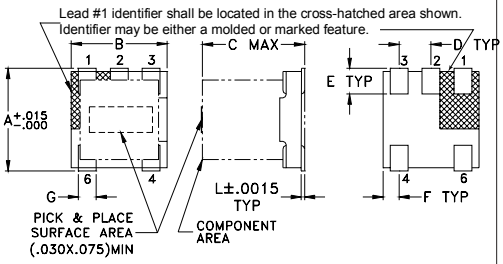
Applications

- push-pull amplifier
- impedance matching

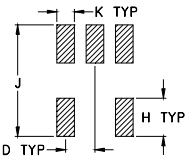
Pin Connections

PRIMARY DOT	6
PRIMARY	4
SECONDARY DOT	1
SECONDARY	3
SECONDARY CT	2

Outline Drawing AT224-1



PCB Land Pattern



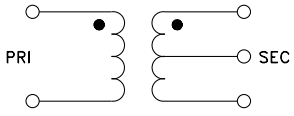
Suggested Layout,
Tolerance to be within ±.002

Outline Dimensions (inch / mm)

A	B	C	D	E	F
.150	.150	.160	.050	.040	.025
3.81	3.81	4.06	1.27	1.02	0.64

G	H	J	K	L	wt
.028	.065	.190	.030	.007	grams
0.71	1.65	4.83	0.76	0.18	0.15

Config. A



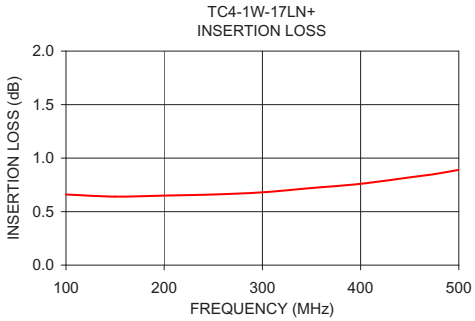
Transformer Electrical Specifications

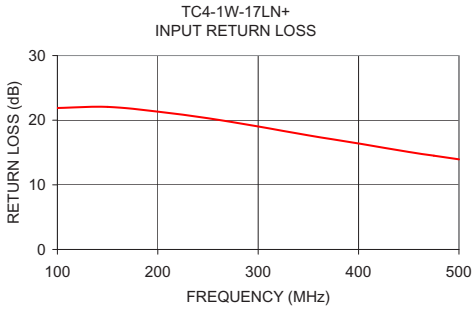
Ω RATIO (Secondary/ Primary)	FREQUENCY (MHz)	INSERTION LOSS* 1 dB MHz	PHASE UNBALANCE (Deg.) Typ.	AMPLITUDE UNBALANCE (dB) Max.	RETURN LOSS (dB) Typ.
4	100 - 500	100 - 500	3	1.0	10

*Insertion Loss is referenced to mid-band loss, 0.6 dB typ.

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)
100.00	0.66	21.89
150.00	0.64	22.06
200.00	0.65	21.32
250.00	0.66	20.30
300.00	0.68	19.03
350.00	0.72	17.66
400.00	0.76	16.40
450.00	0.82	15.09
475.00	0.85	14.51
500.00	0.89	13.95





Notes
A. 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.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp