RF Transformer

TC1-1-43A+

50Q

650 to 4000 MHz

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	250mW
DC Current	30mA
Pormanant damage may occur if any o	of those limits are eveneded

Pin Connections

PRIMARY DOT	6
PRIMARY	4
SECONDARY DOT	1
SECONDARY	3
NOT USED	2

Features

- wideband, 650 to 4000 MHz
- balanced transmission line
- good return loss
- excellent amplitude unbalance, 0.5 dB typ. and phase unbalance, 3 deg typ. in 1 dB bandwidth
- plastic base with leads
- aqueous washable

Applications

- balanced to unbalanced transformation
- push-pull amplifiers
- PCS/DCS
- MMDS

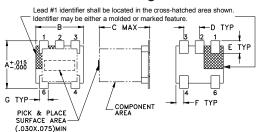
CASE STYLE: AT224-1A

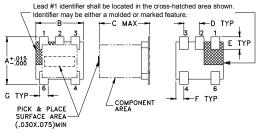
+RoHS Compliant

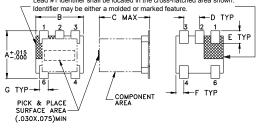
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications



Outline Drawing AT224-1A









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

Outline Dimensions (inch)

F	Е	D	С	В	Α
.025	.040	.050	.160	.150	.150
0.64	1.02	1.27	4.06	3.81	3.81
wt grams 0.15		K . 030	J . 190 4.83	H .065	G .028

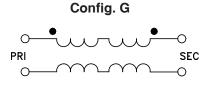
Electrical Specifications (T_{AMB}=25°C)

Ω RATIO	FREQUENCY (MHz)	INSERTION LOSS*		UNBAI	ASE LANCE eg.) /p.	UNBAI (d	ITUDE LANCE B) /p.
		2 dB MHz	1 dB MHz	1 dB bandwidth	2 dB bandwidth	1 dB bandwidth	2 dB bandwidth
1	650-4000	650-4000	800-3000	3	4	0.5	0.5

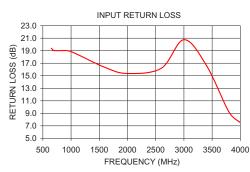
*Insertion Loss is referenced to mid-band loss, 0.5 dB tvp.

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
650.00	0.30	19.40	0.72	7.04
700.00	0.30	19.03	0.70	6.11
800.00	0.32	19.01	0.65	4.73
1000.00	0.35	18.85	0.50	3.45
1600.00	0.45	16.34	0.15	0.32
2000.00	0.53	15.36	0.05	0.42
2600.00	0.62	16.20	0.40	0.66
3000.00	0.57	20.76	0.56	1.07
3800.00	1.34	9.18	0.41	4.79
4000.00	1.71	7.51	0.09	5.95







- 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