SURFACE MOUNT

RF Transformer

TC1.5-1+

TC1.5-1X+ Upgraded Version*

50Ω 0.5 to 2200 MHz

FEATURES

- Wideband, 0.5-2200 MHz
- Excellent Return Loss
- Terminations, Tin Plated with Nickel Barrier for Solderability & Excellent Leach Resistance
- Autotransformer
- Plastic Base with Leads
- Aqueous Washable



Generic photo used for illustration purposes only

CASE STYLE: AT224-1A

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

** Addition of Top Hat™ Feature*
Benefits
• Allows faster pick-and-place
• Enables visual identification marking

APPLICATIONS

- Impedance Matching

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Impedance Ratio (Secondary/Primary)			1.5		
Frequency Range		0.5		2200	MHz
Insertion Loss[1]	0.5-2200 1-2000 2-1100	– – –	3 2 1	– – –	dB

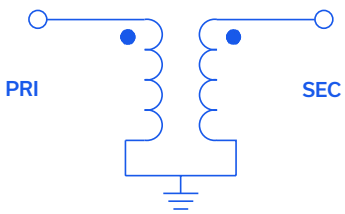
1. Insertion Loss is referenced to mid-band loss, 0.3 dB typ.

ABSOLUTE MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-20°C to +85°C
Storage Temperature	-55°C to +100°C
RF Power	0.25 W
DC Current	30 mA

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

CONFIG. D



REV. E
ECO-025303
TC1.5-1+
MCL NY
260423

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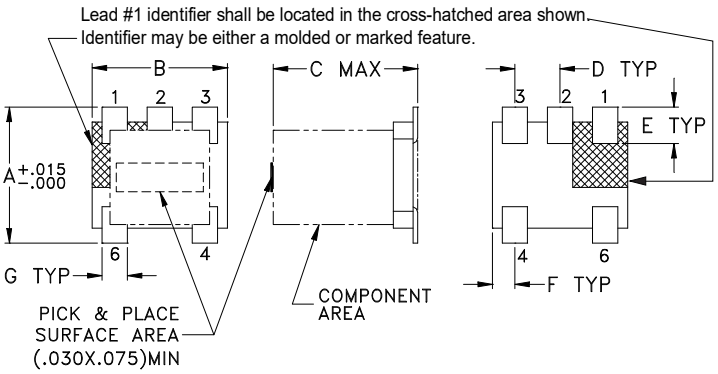
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PIN CONNECTIONS

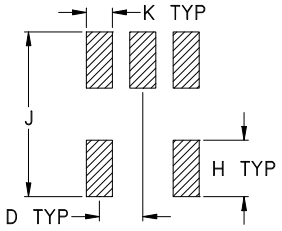
Function	Pin Number
PRIMARY DOT	6
PRIMARY	4
SECONDARY DOT	1
SECONDARY	4
NOT USED	2

PRODUCT MARKING: N/A

OUTLINE DRAWING



PCB Land Pattern



Suggested Layout,
Tolerance to be within±.002 in

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	wt
.028	.065	.190	.030	grams
0.71	1.65	4.83	0.76	0.15

TAPE & REEL INFORMATION: F17

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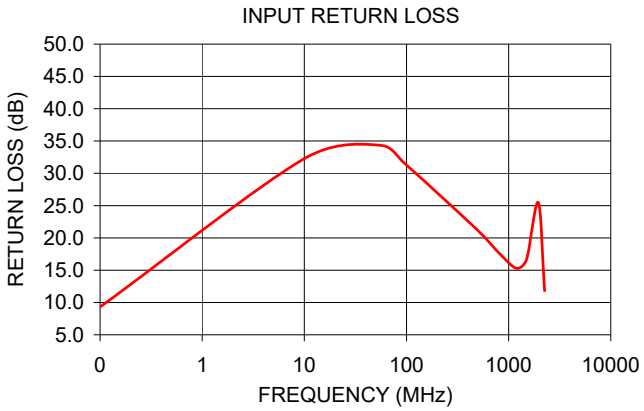
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50Ω 0.5 to 2200 MHz

TYPICAL PERFORMANCE DATA

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)
0.10	0.79	9.30
10.00	0.34	32.27
55.00	0.26	34.33
100.00	0.28	31.27
500.00	0.38	21.15
800.00	0.47	17.71
1200.00	0.59	15.28
1500.00	0.71	16.70
1950.00	1.04	25.47
2250.00	1.43	11.82





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/terms/viewterm.html