SURFACE MOUNT

RF Transformer

ADT16-1T+

50Ω 1.5 to 160 MHz

FEATURES

- Excellent Return Loss, 16 dB Typ.
- Excellent Amplitude Unbalance, 0.1 dB Typ.
- Excellent Phase Unbalance, 1 Deg. Typ.
- Aqueous Washable
- Protected Under US Patent 6,133,525



Generic photo used for illustration purposes only

CASE STYLE: CD542

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

APPLICATIONS

- Impedance Matching
- Baluns

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Units
Impedance Ratio (Secondary/Primary)			16		
Frequency Range		1.5		160	MHz
Insertion Loss[1]	1.5-160 3-105 5-65		3 2 1		dB
Amplitude Unbalance	5-65 3-105		0.1 0.1		dB
Phase Unbalance	5-65 3-105		1 1		Degree

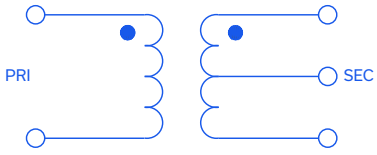
1. Insertion Loss is referenced to mid-band loss, 0.9 dB typ.

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.

CONFIGURATION A



REV. F
ECO-014934
ADT16-1T+
MCL NY
251104

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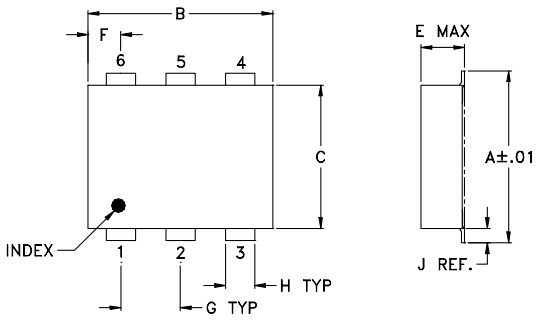
PIN CONNECTIONS

PRIMARY DOT	3
PRIMARY	1
SECONDARY DOT	4
SECONDARY	6
SECONDARY CT	5
NOT USED	2

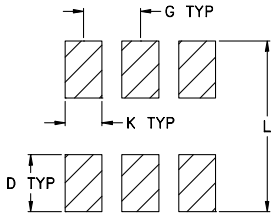
PRODUCT MARKING: ADT16-1T+

DEMO BOARD MCL P/N: TB-ADT16-1T+

OUTLINE DRAWING



PBC Land Pattern



Suggested Layout,
Tolerence to be within ±.002 in

OUTLINE DIMENSIONS (Inches / mm)

A	B	C	D	E	F	G
.272	.310	.220	.100	.112	.055	.100
6.91	7.87	5.59	2.54	2.84	1.40	2.54

H	J	K	L	wt
.030	.026	.065	.300	grams
0.76	0.66	1.65	7.62	0.20

TAPE & REEL INFORMATION: F34

RF Transformer

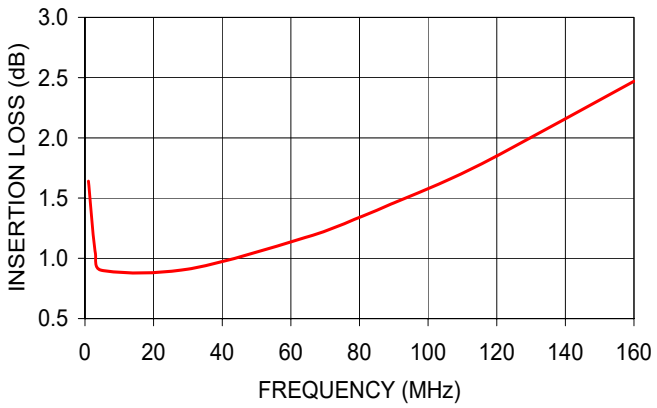
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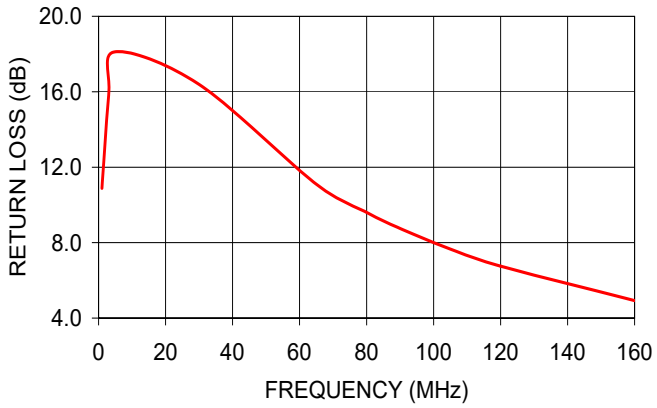
TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Amplitude Unbalance (dB)	Phase Unbalance (deg)
1	1.64	10.88	0.01	0.06
3	1.05	15.81	0.01	0.03
5	0.90	18.12	0.01	0.02
30	0.91	16.39	0.01	0.03
65	1.18	11.10	0.00	0.04
80	1.34	9.60	0.00	0.04
90	1.46	8.75	0.00	0.11
105	1.64	7.66	0.01	0.03
120	1.85	6.75	0.01	0.02
160	2.47	4.93	0.04	0.07

INSERTION LOSS



INPUT RETURN LOSS



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