

Mini-Circuits

SURFACE MOUNT

RF Transformer

ADT2-1T-1P-17+

50Ω 8 to 600 MHz

FEATURES

- Excellent return loss, 15 dB typ.
- Excellent amplitude unbalance, 0.1 dB typ. and phase unbalance, 1 deg. typ.
- High RF power up to 1 watt
- 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 40°C TO 105°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Units
Impedance Ratio (Secondary / Primary)		2			
Frequency Range		8	—	600	MHz
Insertion Loss*	8-600	—	3	—	dB
	10-400	—	2	—	
	13-300	—	1	—	
Phase Unbalance Stability**	100-500	—	2.45	—	deg.
Amplitude Unbalance Stability**	100-500	—	1.1	—	dB

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

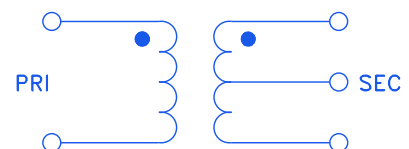
**Stability refers to variation in performance over temperature

MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-40°C to 105°C
Storage Temperature	-55°C to 105°C
RF Power	1W
DC Current	30mA

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

CONFIGURATION A

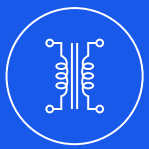


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REV. OR
NPO-003202
ADT2-1T-1P-17+
WP/CP/AM
221110

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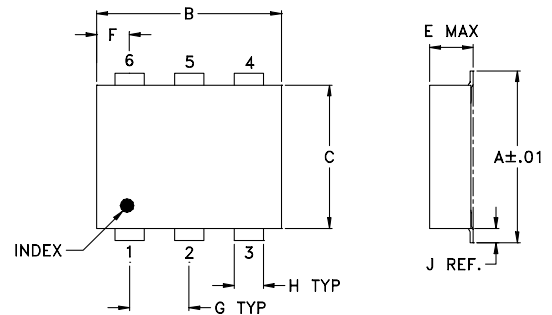
PIN CONNECTIONS

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

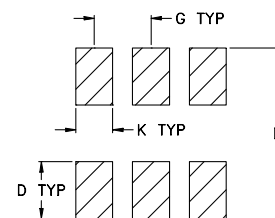
PRODUCT MARKING: ADT2-1T-1P+

DEMOBOARD MCL P/N: TB-430

OUTLINE DRAWING

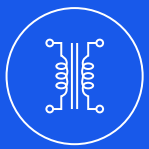


PBC Land Pattern

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

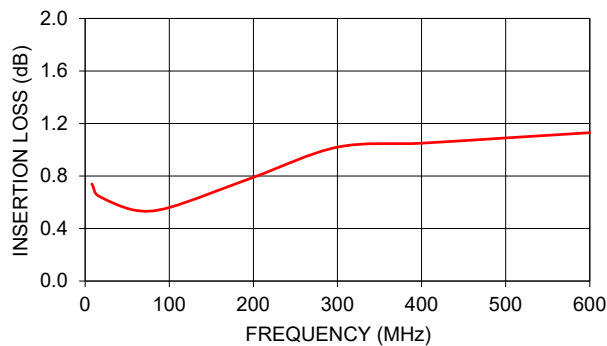
TAPE & REEL INFORMATION: F34



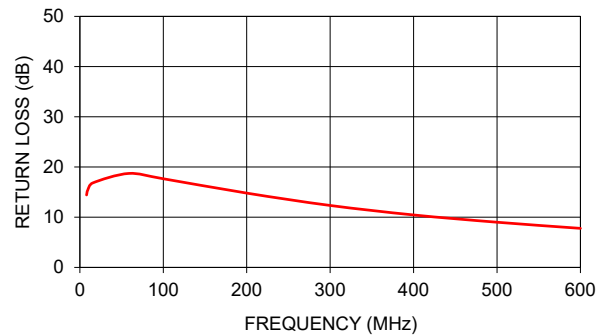
TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Amplitude Unbalance (dB)	Phase Unbalance (deg.)
8.00	0.74	14.43	0.00	0.06
9.50	0.72	15.42	0.01	0.06
15.50	0.65	16.83	0.00	0.03
58.75	0.54	18.72	0.01	0.14
100.00	0.56	17.66	0.03	0.00
200.00	0.79	14.80	0.13	0.11
300.00	1.02	12.34	0.33	0.51
400.00	1.05	10.45	0.66	1.24
500.00	1.09	9.00	1.10	2.48
600.00	1.13	7.78	1.78	4.22

ADT2-1T-1P-17+
INSERTION LOSS



ADT2-1T-1P-17+
INPUT RETURN LOSS



NOTES

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- 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