SURFACE MOUNT

RF Transformer

ADT1-1+

50Ω 0.15 to 400 MHz

FEATURES

- Good return loss, 22 dB in 1 dB bandwidth
- Excellent amplitude unbalance, 0.1 dB typ. and phase unbalance, 2 deg. typ. in 1dB bandwidth
- 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			1		
Frequency Range		0.15		400	MHz
Insertion Loss*	0.15-400	—	3	—	dB
	0.2-200	—	2	—	
	0.3-100	—	1	—	
Amplitude Unbalance	0.2-200	—	0.5	—	dB
	0.3-100	—	0.1	—	
Phase Unbalance	0.2-200	—	5	—	Degree
	0.3-100	—	2	—	

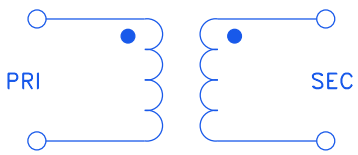
* Insertion Loss is referenced to mid-band loss, 0.3 dB typ.

MAXIMUM RATINGS

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

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

CONFIGURATION C



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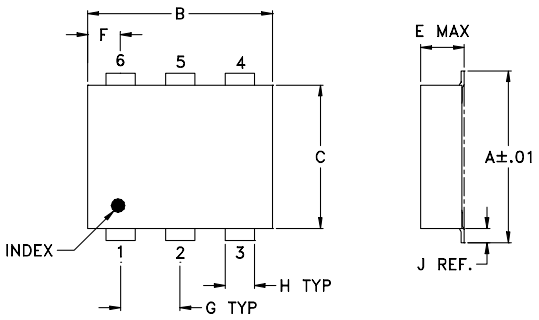
PIN CONNECTIONS

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

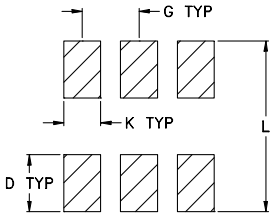
PRODUCT MARKING: N/A

DEMOBOARD MCL P/N: TB-430

OUTLINE DRAWING



PBC Land Pattern



Suggested Layout,
Tolerence to be within ±.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

SURFACE MOUNT

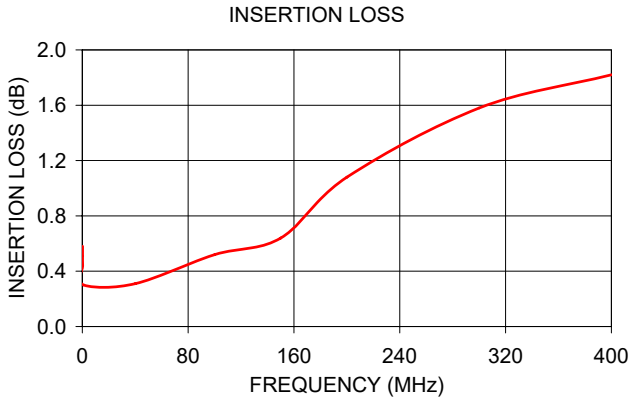
RF Transformer

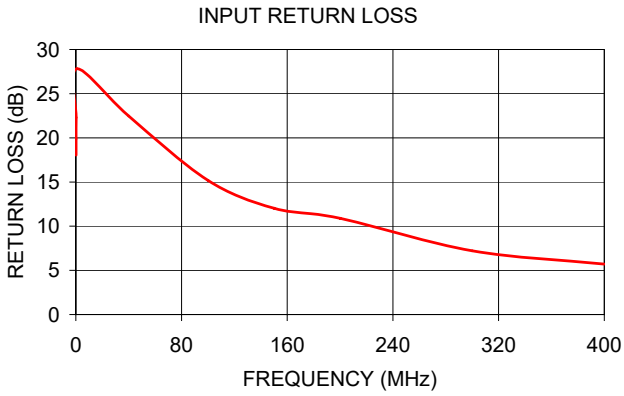
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50Ω 0.15 to 400 MHz

TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Amplitude Unbalance (dB)	Phase Unbalance (deg)
0.15	0.58	18.04	0.01	0.06
0.20	0.51	19.90	0.01	0.02
0.30	0.44	22.30	0.02	0.00
1.00	0.30	27.82	0.00	0.08
40.00	0.31	22.47	0.04	1.44
100.00	0.52	15.19	0.22	3.60
150.00	0.64	12.04	0.53	5.83
200.00	1.08	10.90	0.99	7.98
300.00	1.58	7.21	2.21	14.28
400.00	1.82	5.71	4.06	24.39





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