# Surface Mount **RF Transformer**

#### 0.5 to 1700 MHz **50**0

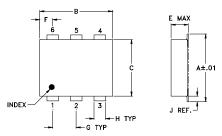
# **Maximum Ratings**

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.		

#### **Pin Connections**

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

# **Outline Drawing**



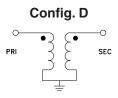
# PCB Land Pattern -G TYP D TYP Suggested Layout

Tolerance to be within ±.002

## Outline Dimensions (inch)

A	<b>B</b>	C	D	E	<b>F</b>	<b>G</b>
.272	.310	.220	.100	.112	. <b>055</b>	.100
6.91	7.87	5.59	2.54	2.84	1.40	2.54
H .030 0.76	J . <b>026</b> 0.66	<b>K</b> . <b>065</b> 1.65	L .300 7.62			wt grams 0.20

#### Demo Board MCL P/N: TB-40



# **Features**

- wideband, 0.5 to 1700 MHz
- autotransformer
- excellent return loss, 20 dB typ. in 1 dB bandwidth
- aqueous washable
- protected under US patent 6,133,525

### **Applications**

- impedance matching
- GPS • satellite distributor

ADT1.5-17+



#### Generic photo used for illustration purposes only CASE STYLE: CD542

#### +RoHS Compliant

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

	Available Tape and Reel at no extra cost
Reel Size	Devices/Reel
7"	20, 50, 100, 200
13"	500,1000

# **Transformer Electrical Specifications**

Ω RATIO (Secondary/Primary)	FREQUENCY (MHz)	3 dB MHz	INSERTION LOSS*	1 dB MHz
1.5	0.5-1700	0.5-1700	1-1500	2-1100

\* Insertion Loss is referenced to mid-band loss, 0.4 dB typ.

# **Typical Performance Data**

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FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	
0.50	0.65	17.56	
1.00	0.55	19.45	
2.00	0.43	21.26	
51.00	0.35	24.57	
100.00	0.38	24.78	
766.66	0.58	21.77	
1100.00	0.79	15.52	
1400.00	1.24	12.50	
1550.00	1.29	11.36	
1700.00	1.47	10.16	





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.
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