RF Transformer

ADT1.5-17+

0.5 to 1700 MHz 50Q

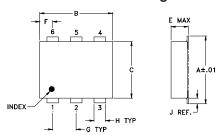
Maximum Ratings

| 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 |

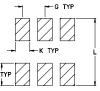
Pin Connections

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

Outline Drawing



PCB Land Pattern

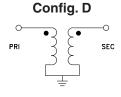


Suggested Layout Tolerance to be within ±.002

Outline Dimensions (inch)

| G | F | Ε | D | С | В | Α |
|-------|------|------|------|------|------|------|
| .100 | .055 | .112 | .100 | .220 | .310 | .272 |
| 2.54 | 1.40 | 2.84 | 2.54 | 5.59 | 7.87 | 6.91 |
| | | | | | | |
| wt | | | L | K | J | Н |
| grams | | | .300 | .065 | .026 | .030 |
| 0.20 | | | 7.62 | 1.65 | 0.66 | 0.76 |

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

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



Applications

- impedance matching
- GPS
- · satellite distributor

Transformer Electrical Specifications

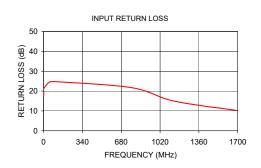
| Ω RATIO (Secondary/Primary) | FREQUENCY (MHz) | 3 dB MHz | INSERTION LOSS* 2 dB MHz | 1 dB MHz |
|--|--------------------|-------------|---------------------------|-------------|
| 1.5 | 0.5-1700 | 0.5-1700 | 1-1500 | 2-1100 |

^{*} Insertion Loss is referenced to mid-band loss, 0.4 dB typ.

Typical Performance Data

| 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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