

Surface Mount RF Transformer

ADT1-1+ ADT1-1

50Ω 0.15 to 400 MHz

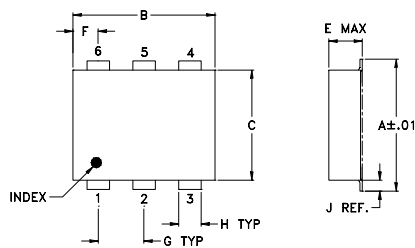
Maximum Ratings

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

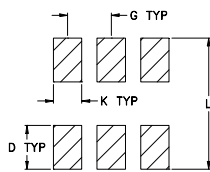
Pin Connections

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

Outline Drawing



PCB Land Pattern



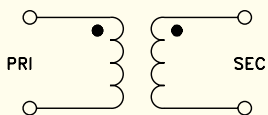
Suggested Layout,
Tolerance to be within ±.002

Outline Dimensions (inch/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 | | |

Demo Board MCL P/N: TB-42

Config. C



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

Applications

- impedance matching
- baluns



CASE STYLE: CD542
PRICE: \$2.95 ea. QTY (10-49)

+ RoHS compliant in accordance
with EU Directive (2002/95/EC)

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

Transformer Electrical Specifications

| Ω RATIO | FREQUENCY (MHz) | INSERTION LOSS* | | | PHASE UNBALANCE (Deg.) Typ. | | AMPLITUDE UNBALANCE (dB) Typ. | |
|------------|--------------------|-----------------|-------------|-------------|--------------------------------------|-------------------|--|-------------------|
| | | 3 dB MHz | 2 dB MHz | 1 dB MHz | 1 dB bandwidth | 2 dB bandwidth | 1 dB bandwidth | 2 dB bandwidth |
| 1 | 0.15-400 | 0.15-400 | 0.2-200 | 0.3-100 | 2 | 5 | 0.1 | 0.5 |

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

Typical Performance Data

| FREQUENCY (MHz) | INERTION LOSS (dB) | INPUT R. 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 |

ADT1-1
INSERTION LOSS

