

Surface Mount RF Transformer

TC16-1TG2+

50Ω 20 to 300 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 |
| SECONDARY CT | 2 |



CASE STYLE: AT224-3
PRICE: \$1.79 ea. QTY (100)

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

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Features

- suitable for tin/lead and RoHS solder systems
- plastic base with leads
- aqueous washable

Applications

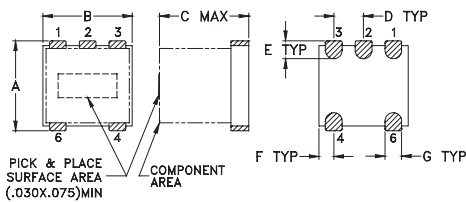
- catv

Transformer Electrical Specifications

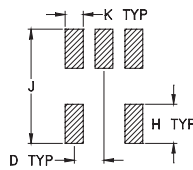
| Ω RATIO (Secondary/Primary) | FREQUENCY (MHz) | INSERTION LOSS* | | | PHASE UNBALANCE (Deg.) Typ. | | AMPLITUDE UNBALANCE (dB) Typ. | |
|-----------------------------------|--------------------|-----------------|-------------|-------------|-----------------------------------|-------------------|-------------------------------------|-------------------|
| | | 3 dB MHz | 2 dB MHz | 1 dB MHz | 1 dB bandwidth | 2 dB bandwidth | 1 dB bandwidth | 2 dB bandwidth |
| 16 | 20-300 | 20-300 | 30-200 | 50-150 | 4 | 5 | 0.3 | 0.5 |

* Insertion Loss is referenced to mid-band loss, 1 dB typ.

Outline Drawing AT224-3



PCB Land Pattern



Suggested Layout,
Tolerance to be within ±.002

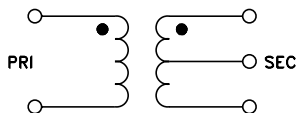
Outline Dimensions (inch/mm)

| A | B | C | D | E | F | |
|------|------|------|------|------|-------|--|
| .150 | .150 | .150 | .050 | .030 | .025 | |
| 3.81 | 3.81 | 3.81 | 1.27 | 0.76 | 0.64 | |
| G | H | J | K | | wt | |
| .028 | .065 | .190 | .030 | | grams | |
| 0.71 | 1.65 | 4.83 | 0.76 | | 0.10 | |

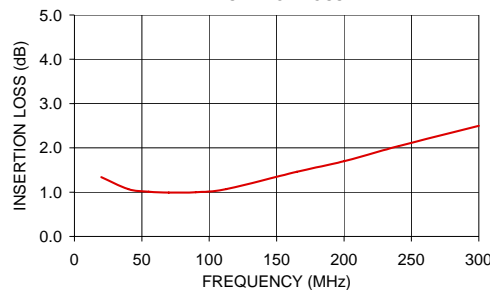
Typical Performance Data

| FREQUENCY (MHz) | INSERTION LOSS (dB) | INPUT R. LOSS (dB) |
|--------------------|---------------------------|--------------------------|
| 20.00 | 1.34 | 13.77 |
| 40.00 | 1.07 | 16.14 |
| 55.00 | 1.01 | 15.90 |
| 70.00 | 0.99 | 14.80 |
| 90.00 | 1.00 | 13.12 |
| 112.50 | 1.07 | 11.35 |
| 165.00 | 1.46 | 8.32 |
| 200.00 | 1.70 | 6.90 |
| 240.60 | 2.04 | 5.63 |
| 300.00 | 2.50 | 4.34 |

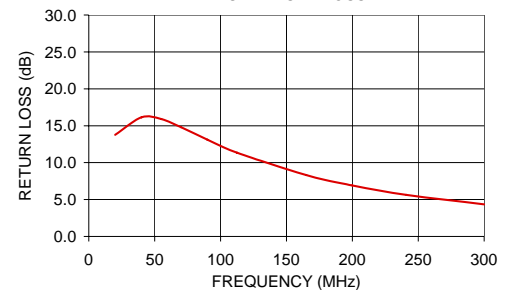
Config. A



TC16-1TG2+
INSERTION LOSS



TC16-1TG2+
INPUT RETURN LOSS



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RF/IF MICROWAVE COMPONENTS

REV. A
M111888
TC16-1TG2+
ED-7614/3
WP/TD/CP/AM
081013