

# TC4-14+ Datasheet

[www.digi-electronics.com](http://www.digi-electronics.com)



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	TC4-14+-DG
Manufacturer	<a href="#">Mini-Circuits</a>
Manufacturer Product Number	TC4-14+
Description	1:4 CORE & WIRE TRANSFORMER, 200
Detailed Description	RF Balun 200MHz ~ 1.4GHz 1:4 5-SMD Module

This model TC4-14+ is available at DiGi Electronics.

DiGi Electronics offers a global database of semiconductor and electronic component datasheets.

We welcome your inquiries regarding pricing, lead time, or other product-related questions.

 [Request a Quote](#)

 [Datasheet Search](#)



Tel: +00 852-30501935

RFQ Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)

DiGi is a global authorized distributor of electronic components.

## Purchase and inquiry

Manufacturer Product Number:

TC4-14+

Series:

-

Frequency Range:

200MHz ~ 1.4GHz

Phase Difference:

-

Return Loss (Min):

5.05dB

Mounting Type:

Surface Mount

Manufacturer:

Mini-Circuits

Product Status:

Active

Impedance - Unbalanced/Balanced:

1:4

Insertion Loss (Max):

3dB

Package / Case:

5-SMD Module

## Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.31.4035

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



SURFACE MOUNT

# RF Transformer

## TC4-14+

**50Ω    200 to 1400 MHz**

- \*Addition of Top Hat® feature Benefits**
- Allows faster pick-and-place
  - Enables visual identification marking

### FEATURES

- Good return loss
- Wideband, 200 to 1400 MHz
- Plastic base with leads
- Aqueous washable



*Generic photo used for illustration purposes only*

CASE STYLE: AT224-1

### +RoHS Compliant

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

### APPLICATIONS

- Impedance matching
- Push-pull amplifiers

### ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Impedance Ratio (secondary / primary)			4		
Frequency Range		200	—	1400	MHz
Insertion Loss*	200-1400		3		dB
	300-1300		2		
	800-1100		1		

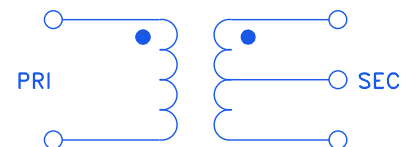
\* Insertion Loss is referenced to mid-band loss, 0.7 dB typ.

### 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.

### CONFIG. A





**SURFACE MOUNT**

# RF Transformer

**TC4-14+**

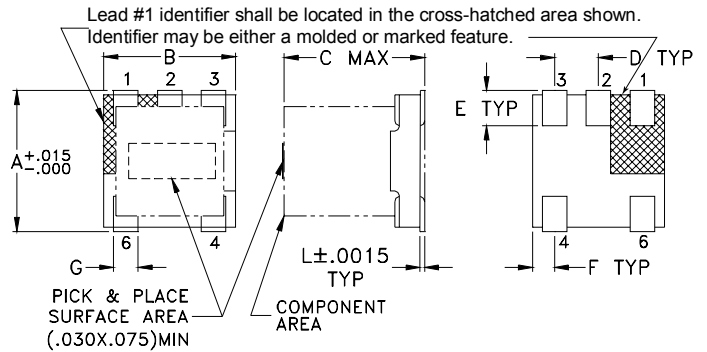
50Ω 200 to 1400 MHz

**PIN CONNECTIONS**

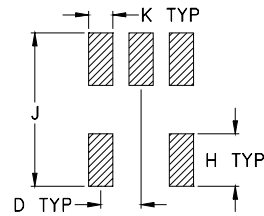
PRIMARY DOT	6
PRIMARY	4
SECONDARY DOT	3
SECONDARY	1
SECONDARY CT	2

**PRODUCT MARKING:** NA

**OUTLINE DRAWING**



**PCB Land Pattern**



Suggested Layout,  
Tolerance to be within ±.002

**OUTLINE DIMENSIONS (Inch mm)**

A	B	C	D	E	F	G	H	J	K	L
.150	.150	.160	.050	.040	.025	.028	.065	.190	.030	.007
3.81	3.81	4.06	1.27	1.02	0.64	0.71	1.65	4.83	0.76	0.18

Weight: 0.15 grams

**TAPE & REEL INFORMATION: F17**



**SURFACE MOUNT**

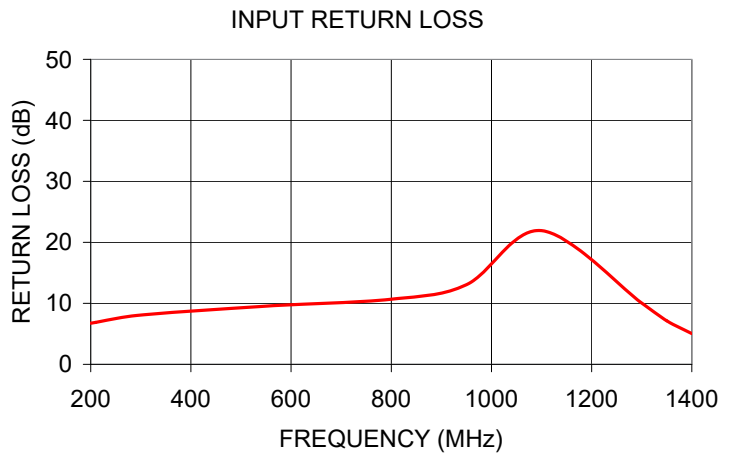
# RF Transformer

**TC4-14+**

50Ω 200 to 1400 MHz

**TYPICAL PERFORMANCE DATA**

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)
200.00	1.33	6.74
210.00	1.26	6.88
300.00	1.22	8.07
550.00	0.92	9.54
800.00	0.88	10.68
950.00	0.82	13.05
1100.00	0.70	21.93
1300.00	1.53	10.04
1350.00	1.77	7.15
1400.00	2.77	5.05



**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](http://www.minicircuits.com/terms/viewterm.html)



## OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we stricly control the quality of products and services. Welcome your RFQ to

Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)



Tel: +00 852-30501935

RFQ Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)

DiGi is a global authorized distributor of electronic components.