

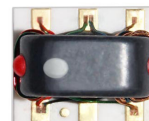
# Surface Mount RF Transformer

## TX4-62HP+

50Ω      20 to 600 MHz

### The Big Deal

- High power/high DC Current (10W, 30mA)
- High impedance ratio 4:1
- Low insertion loss, 0.8 dB
- Leadless surface mount design



CASE STYLE: TT597

### Product Overview

The TX4-62HP+ is a high-power, surface-mount balanced transmission line transformer with a high impedance ratio (4:1) covering the 20 to 600 MHz band. It achieves 10W power handling with low insertion loss and good phase and amplitude unbalance (4°, 0.7 dB respectively). This model is ideal for applications including impedance matching of amplifiers, push-pull amplifiers and more. Featuring core and wire construction on a leadless base with gold over nickel plate terminations, the unit measures just 0.31 x 0.25 x 0.20", ideal for dense circuit board layouts.

Feature	Advantages
High RF Power, 10W High DC Current, 30mA	Supports systems with high power and DC current requirements.
Low insertion loss, 0.8 dB	Excellent transmission of signal power from input to output.
Leadless design	Minimizes losses due to transmission line length.
Small footprint, 0.31 x 0.25 x .20"	Accommodates tight space requirements for dense PCB layouts.

#### 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/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)

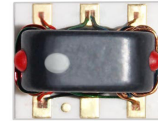


# Surface Mount RF Transformer

50Ω

20 to 600 MHz

TX4-62HP+



CASE STYLE: TT597

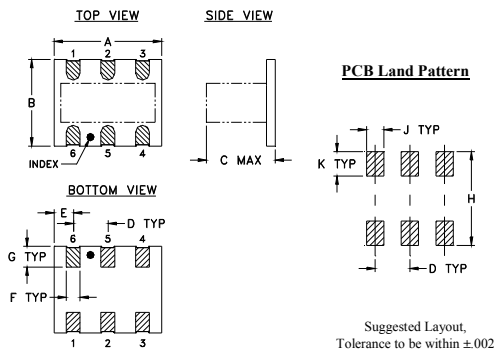
## Maximum Ratings

Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	10W
DC Current	30mA
Permanent damage may occur if any of these limits are exceeded.	

## Pin Connections

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

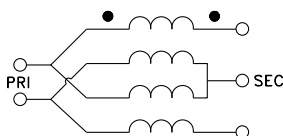
## Outline Drawing



## Outline Dimensions (inch/mm)

A	B	C	D	E	F
.310	.250	.20	.100	.055	.040
7.87	6.35	5.08	2.54	1.40	1.02
G	H	J	K	wt.	
.060	.270	.050	.070	grams	
1.52	6.86	1.27	1.78	0.4	

## Config. H



## Features

- high power/high DC current
- wideband 20 to 600 MHz
- high impedance ratio 4:1
- leadless surface mount

## Applications

- impedance matching of amplifiers
- push-pull amplifiers
- VHF/UHF receivers/transmitters

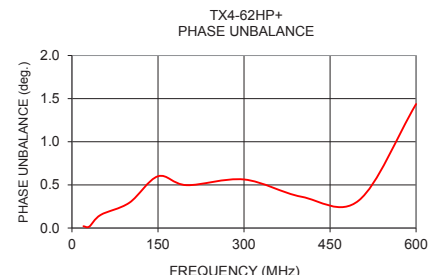
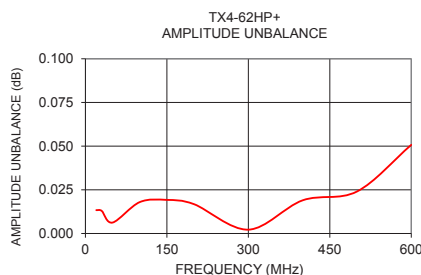
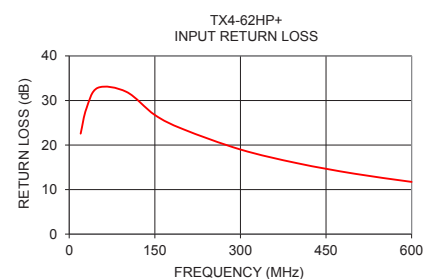
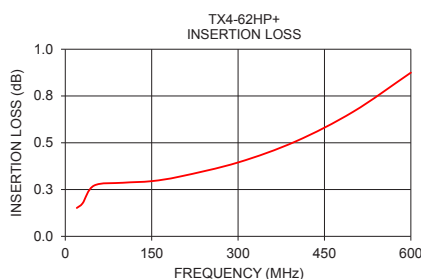
## Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Impedance Ratio (secondary/primary)			4		
Frequency Range		20	—	600	MHz
Insertion Loss*	30-400	—	0.4	1	dB
	20-600	—	0.8	2	
Amplitude Unbalance	30-400	—	0.3	0.8	dB
	20-600	—	0.7	1.7	
Phase Unbalance	30-400	—	2.0	7	Degree
	20-600	—	4.0	10	

\* Insertion Loss is referenced to mid-band loss, 0.2 dB typ. The user must provide adequate means of heat removal to limit the temperature of PCB to 85°C, in order to ensure proper performance. At 25°C ambient this requires thermal resistance of the user's PCB heat sink to be less of 30°C/W.

## Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
20	0.15	22.56	0.01	0.02
30	0.18	28.15	0.01	0.02
50	0.27	32.84	0.01	0.15
100	0.29	31.95	0.02	0.29
150	0.29	26.75	0.02	0.60
200	0.32	23.54	0.02	0.50
300	0.39	19.00	0.00	0.56
400	0.51	15.91	0.02	0.36
500	0.67	13.56	0.02	0.32
600	0.87	11.73	0.05	1.44



## Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- 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/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)



[www.minicircuits.com](http://www.minicircuits.com) P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 [sales@minicircuits.com](mailto:sales@minicircuits.com)

REV. OR  
M148492  
TX4-62HP+  
ED-16430/1  
IG/CP/AM  
150416  
Page 2 of 2

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Mini-Circuits:](#)

[TX4-62HP+](#)