

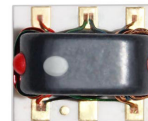
Surface Mount RF Transformer

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

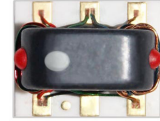
- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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Maximum Ratings

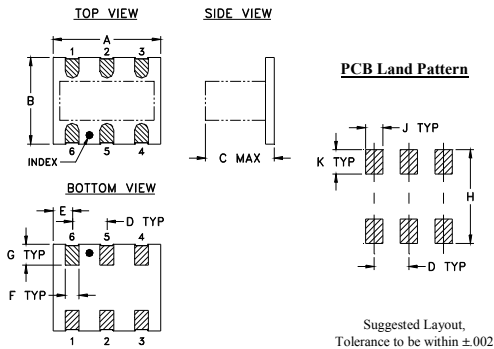
Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	10W
DC Current	30mA

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

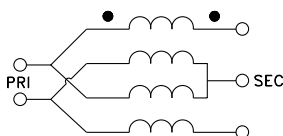
Outline Drawing



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

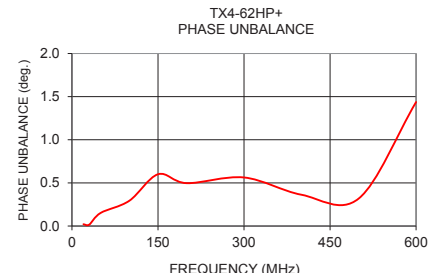
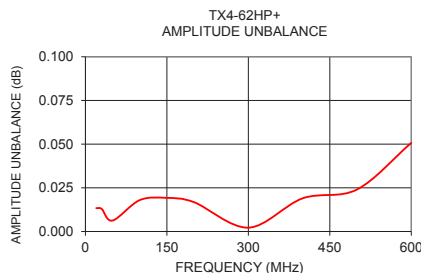
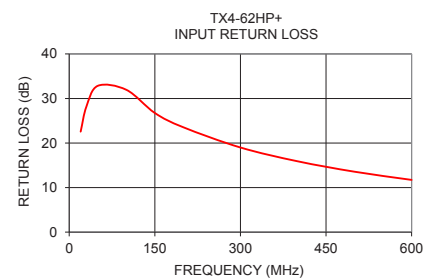
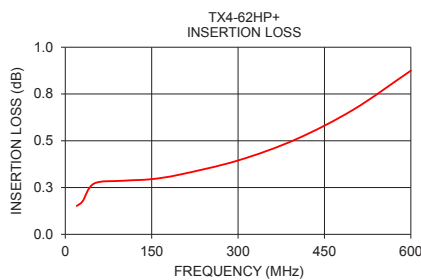
Electrical Specifications at 25°C

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



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