

Surface Mount RF Transformer

TTCM4-4X+

50Ω

0.5 to 400 MHz



CASE STYLE: DB1627

Maximum Ratings

Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	250mW
DC Current	30mA

Permanent damage may occur if any of these limits are exceeded.

Pin Connections

PRIMARY DOT	4
PRIMARY	6
PRIMARY CT	5**
SECONDARY DOT	3
SECONDARY	1
SECONDARY CT	2

** Used only in balanced to balanced configuration.

Features

- wideband, 0.5 to 400 MHz
- excellent amplitude (0.1 dB typ.) and phase unbalance (1° typ.)
- plastic base with solder plated leads
- aqueous washable

Applications

- impedance matching

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

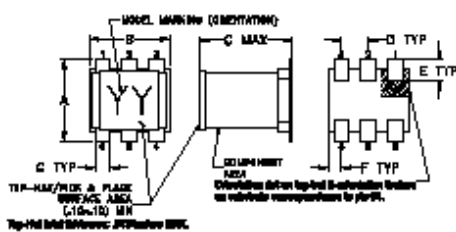
Available Tape and Reel at no extra cost	
Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500
13"	1000, 2000

Transformer Electrical Specifications

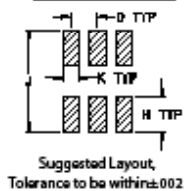
Ω RATIO (Secondary/Primary)	FREQUENCY (MHz)	INSERTION LOSS*			PHASE UNBALANCE (Deg.) Typ.		AMPLITUDE UNBALANCE (dB) Typ.	
		3 dB MHz	2 dB MHz	1 dB MHz	1 dB bandwidth	2 dB bandwidth	1 dB bandwidth	2 dB bandwidth
4	0.5-400	0.5-400	1.3-160	5-100	1	1	0.1	0.1

* Insertion Loss is referenced to mid-band loss, 0.65 dB typ.

Outline Drawing



PCB Land Pattern



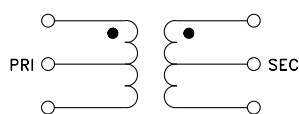
Outline Dimensions (inch/mm)

A	B	C	D	E	F	
.160	.150	.160	.050	.040	.025	
4.06	3.81	4.06	1.27	1.02	0.64	
G	H	J	K		wt	
.028	.065	.190	.030		grams	
0.71	1.65	4.83	0.76		0.15	

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
0.50	1.27	15.05	0.02	0.21
1.00	1.02	16.86	0.02	0.16
1.50	0.90	17.24	0.02	0.11
2.00	0.82	17.30	0.03	0.04
16.00	0.64	16.47	0.04	0.12
100.00	0.82	16.33	0.01	0.43
160.00	0.82	16.19	0.10	0.50
200.00	1.05	14.91	0.16	0.34
300.00	1.46	12.61	0.38	0.93
400.00	1.90	10.01	0.61	4.56

Config. B



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/WCLStore/terms.jsp



www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

REV. A
M151107
TTCM4-4X+
ED-8302/2
IG/TD/CP/AM
190820
Page 1 of 1

