### Surface Mount **RF Transformer** 2 to 500 MHz

50Ω

### **Features**

- wide bandwidth, 2 to 500 MHz
- good return loss
- excellent amplitude unbalance, 0.1 dB typ. and phase
- unbalance, 2 deg typ. in 1 dB bandwidth
- · plastic base with solder plated leads
- aqueous washable

### **Applications**

• impedance matching



## **TCM8-1+**



Generic photo used for illustration purposes only

CASE STYLE: DB714

+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

#### **Electrical Specifications**

Parameter	Frequency (MHz)	Min.	Тур.	Max.	Unit
Impedance Ratio (secondary/primary)			8		Ohm
Frequency Range		2		500	MHz
	2 - 500	_	3	—	
Insertion Loss*	5 - 400	_	2	—	dB
	10 - 100	_	1	_	

\* Insertion Loss is referenced to mid-band loss, 0.8 dB typ.

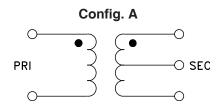
#### **Maximum Ratings**

	Durtau	
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.

#### **Pin Connections**

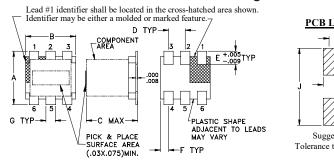
Function	Pin Number
PRIMARY DOT	6
PRIMARY	4
SECONDARY DOT	3
SECONDARY	1
SECONDARY CT	2
NOT USED	5

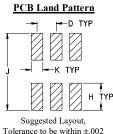


REV. G ECO-006688 TCM8-1+ ED-8235/1 IG/CP/AM 210623

# **TCM8-1+**

#### **Outline Drawing**



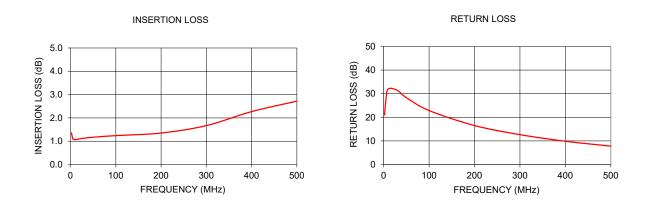


#### Outline Dimensions (inch )

А	В	С	D	E	F
.160	.150	.160	.050	.040	.025
4.06	3.81	4.06	1.27	1.02	0.64
G	н	J	к		wt
G .028	H .065	J .190	K .030		wt grams

#### **Typical Performance Data**

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)
2.00	1.36	20.96
5.00	1.11	27.44
10.00	1.07	32.00
30.00	1.13	31.42
50.00	1.17	28.33
100.00	1.24	22.86
200.00	1.35	16.51
300.00	1.67	12.66
400.00	2.27	9.85
500.00	2.72	7.79



#### **Additional 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.
- A. Performance and quarky attributes and continues and continues and continues and other part of this specification occurrent are interfaced to be excluded and this specification docurrent 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 threin. 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

