



Mini-Circuits

SURFACE MOUNT



RF Transformer

TCM1-43X+

50Ω 10 to 4000 MHz

FEATURES

- Wide bandwidth 10 to 4000 MHz
- Balanced transmission line
- Low insertion loss, 1.1 dB typ.
- Excellent return loss
- Aqueous washable



Generic photo used for illustration purposes only

CASE STYLE: DB1627

+RoHS Compliant

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

APPLICATIONS

- PCS
- Wideband push-pull amplifiers
- Cellular

ELECTRICAL SPECIFICATIONS AT 25°C

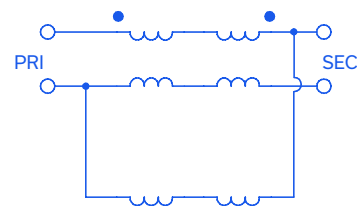
Parameter	Frequency (MHz)	Min.	Typ.	Max.	Units
Impedance Ratio		1			
Frequency Range		10	—	4000	MHz
Insertion Loss	10 - 4000	—	1.1	3.0	dB
Amplitude Unbalance	10 - 4000	—	0.5	—	dB
Phase Unbalance	10 - 4000	—	7	—	Degree

MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	0.4 W
DC Current	30 mA

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

CONFIGURATION K



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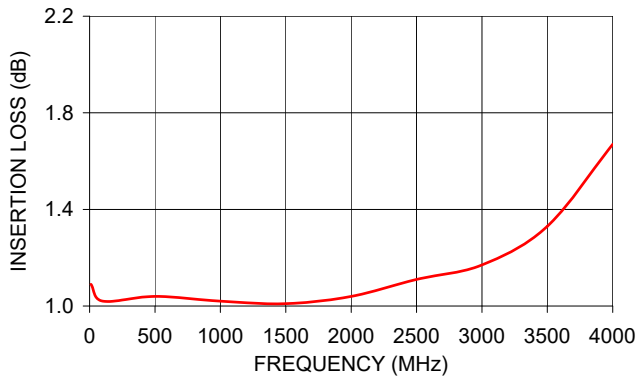
50Ω

10 to 4000 MHz

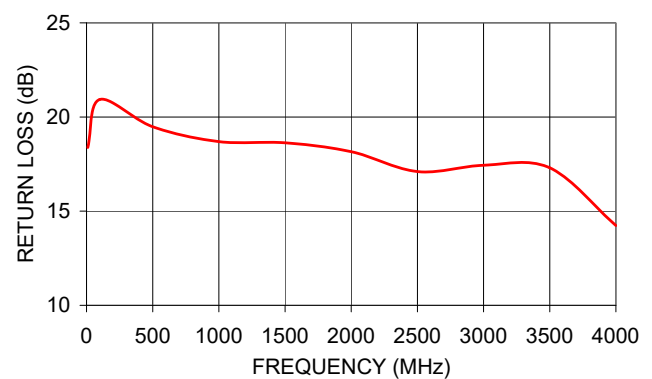
TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Amplitude Unbalance (dB)	Phase Unbalance (deg)
10	1.09	18.38	0.04	0.42
100	1.02	20.93	0.03	0.91
500	1.04	19.48	0.12	3.57
1000	1.02	18.69	0.14	5.58
1500	1.01	18.63	0.07	6.61
2000	1.04	18.16	0.24	6.88
2500	1.11	17.10	0.48	6.85
3000	1.17	17.44	0.73	5.21
3500	1.33	17.30	0.82	3.05
4000	1.67	14.24	0.97	1.66

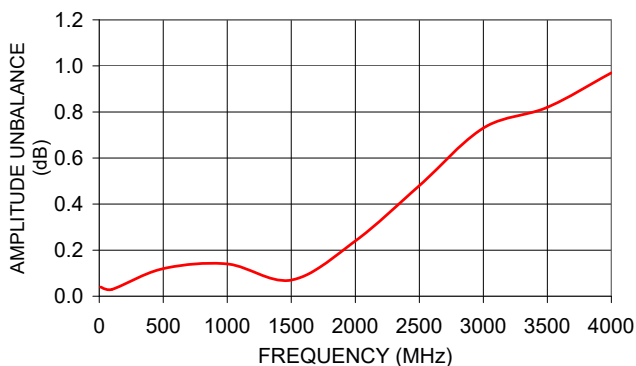
TCM1-43X+
INSERTION LOSS



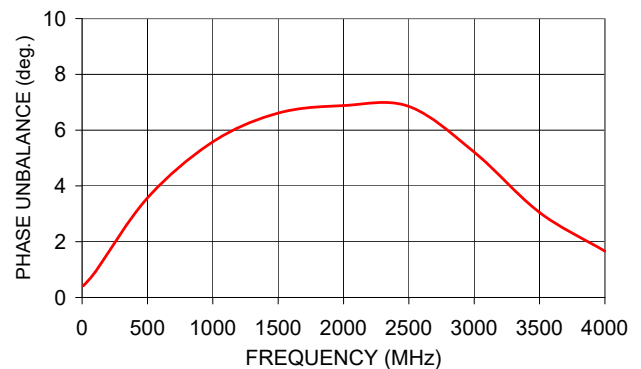
TCM1-43X+
INPUT RETURN LOSS



TCM1-43X+
AMPLITUDE UNBALANCE



TCM1-43X+
PHASE UNBALANCE



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/terms/viewterm.html

