

Mini-Circuits

SURFACE MOUNT

RF Transformer

TC1-72T-75-2+

50Ω 5 to 205 MHz

FEATURES

- Frequency, 5 to 205 MHz
- Low loss, 0.4 dB typ.
- Plastic base with leads
- Aqueous washable



Generic photo used for illustration purposes only

CASE STYLE: AT224-1A

+RoHS Compliant

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

APPLICATIONS

- Impedance matching
- Unbalance to balance transformation
- Cable/CATV and broadband fiber networks
- Used with OneTree Microdevices OTM5180

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Impedance Ratio (secondary/primary)			1		
Frequency Range		5	—	205	MHz
Insertion Loss*	5 - 205	—	0.4	0.9	dB
Amplitude Unbalance	5 - 205	—	0.1	0.7	dB
Phase Unbalance	5 - 205	—	5	12	Degree
Return Loss	5 - 205	—	20	—	dB

*Insertion Loss is referenced to mid-band loss, 0.25 dB typ.

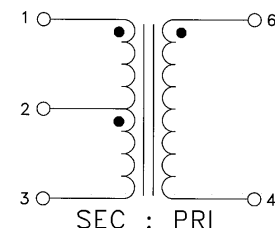
MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	0.25W
DC Current	300mA

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

*150 mA x 2 equally distributed

SCHEMATIC A



REV. C
ECO-022029
TC1-72T-75-2+
MCL NY
240607

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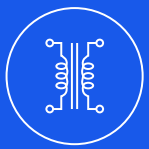


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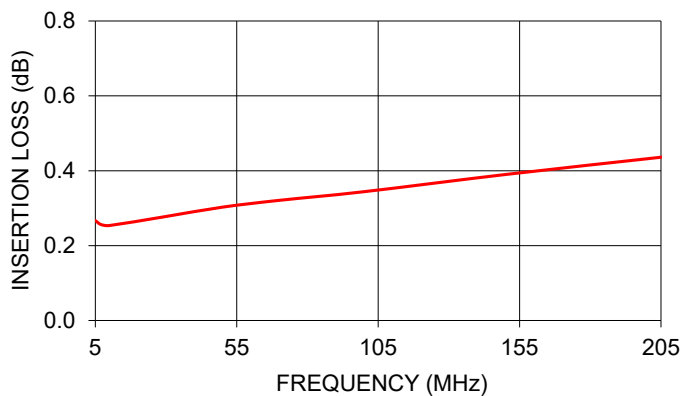
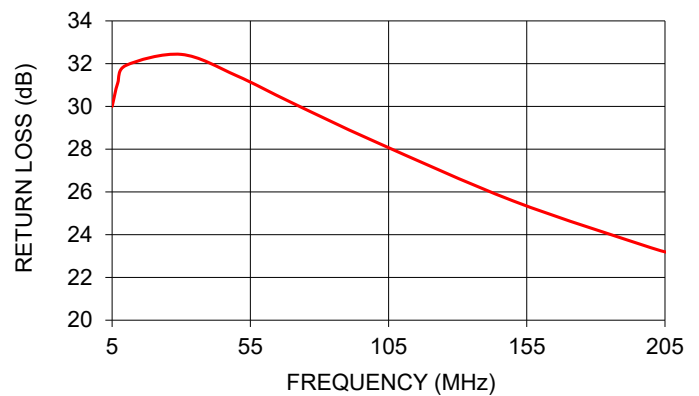
50Ω 5 to 205 MHz

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



TYPICAL PERFORMANCE DATA

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
5.00	0.27	30.00	0.02	0.01
7.00	0.26	31.08	0.01	0.05
10.00	0.25	31.92	0.01	0.13
30.00	0.28	32.43	0.00	0.59
50.00	0.30	31.44	0.01	1.00
70.00	0.32	30.17	0.02	1.40
100.00	0.34	28.36	0.05	1.99
150.00	0.39	25.58	0.11	3.03
200.00	0.43	23.39	0.20	4.06
205.00	0.44	23.20	0.22	4.17
210.00	0.44	23.01	0.23	4.28
250.00	0.48	21.51	0.32	5.17

TC1-72T-75-2+
INSERTION LOSSTC1-72T-75-2+
INPUT RETURN LOSS

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/terms/viewterm.html

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