Surface Mount
RF Transformer

50Ω   0.2 to 120 MHz

ADTT4-1+
ADTT4-1

CASE STYLE: CD636
PRICE: $3.95 ea. QTY. (10-49)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

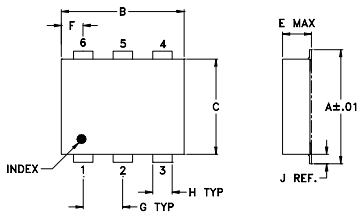*The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.*

Maximum Ratings

Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	0.25W
DC Current	30mA

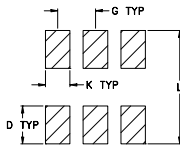Permanent damage may occur if any of these limits are exceeded.

Pin Connections

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

Features
• excellent amplitude unbalance, 0.5 dB bandwidth
• excellent return loss, 25 dB in 1 dB bandwidth
• aqueous washable
• protected under U.S. Patent 6,133,525

Applications
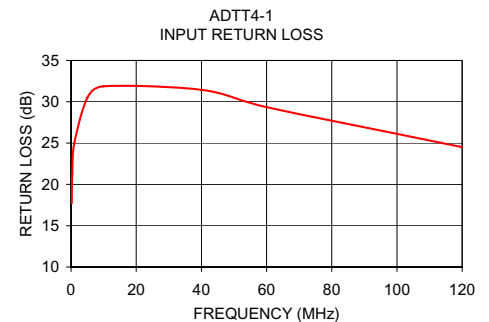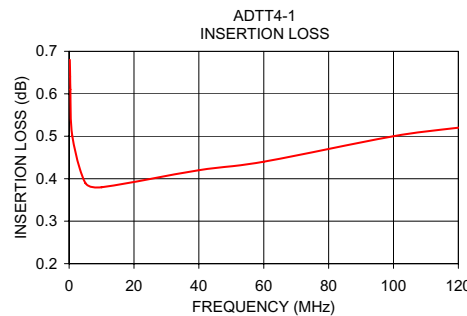• impedance matching
• balanced amplifier

Outline Drawing

PCB Land Pattern

Suggested Layout,
Tolerance to be within ±.002

Outline Dimensions (inch / mm)

A	B	C	D	E	F	G
.272	.310	.220	.100	.162	.055	.100
6.91	7.87	5.59	2.54	4.11	1.40	2.54

H	J	K	L			wt
.030	.026	.065	.300			grams
0.76	0.66	1.65	7.62			0.25

Demo Board MCL P/N: TB-211

Config. B

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	0.2-120	—	—	0.2-120	3	—	0.05	—

* Insertion Loss is referenced to mid-band loss, 0.3 dB typ.

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
0.20	0.68	17.71	0.00	0.04
0.30	0.64	20.04	0.00	0.03
0.40	0.61	21.39	0.00	0.00
1.00	0.50	25.00	0.00	0.04
5.00	0.39	30.48	0.00	0.22
10.00	0.38	31.87	0.01	0.45
40.00	0.42	31.44	0.02	1.79
60.00	0.44	29.35	0.04	2.74
100.00	0.50	26.11	0.10	4.73
120.00	0.52	24.51	0.13	5.85

ADTT4-1 INSERTION LOSS

ADTT4-1 INPUT RETURN LOSS