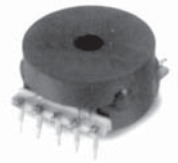


# DATA COMMUNICATION TRANSFORMER

## ADSL SERIES



### FEATURES:

- Excellent THD
- High Reliability

### OPTIONS:

- Bulk packaging is standard
- Custom design available
- EP7, EP10, EP13, RM, POT

### APPLICATIONS:

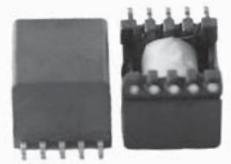
- ADSL Line Transformer
- Analog Devices, Alcatel, Globespan
- Central Office / Customer Premise Equipment

### STANDARD SPECIFICATIONS:

Part Number	Apps	Turns Ratio (Line:Chip) (±2%)	OCL (Line) mH	IL (dB) max	RL Midband (dB) min	Longitudinal Balance (dB) min	THD (dB) min	PKG	CKT
ADSL-101	CO/CPE	1:1:1:1	5.00	1.0 30-320KHz	16.5 30-320KHz	50 0.025-1.1MHz	80	EP13	1
ADSL-102	CPE	1:1:1:1	0.48	1.1 0.04-2MHz	16 0.2-2MHz	50 0.025-1.1MHz	70	EP13	1
ADSL-103	CO	1:1:1:1	0.43	1.1 0.04-2MHz	16.5 0.2-2MHz	60 0.025-1.1MHz	80	EP13	1
ADSL-104	CO/CPE	1:1:1:1	1.25	1.0 0.04-2MHz	15 0.03-1MHz	50 0.025-1.1MHz	80	EP13	4
ADSL-105	CPE	1:1:1:1	0.41	1.5 0.04-2MHz	16 0.2-2MHz	55 0.025-1.1MHz	80	EP13	1
ADSL-106	CO	1:1.95	1.50	1.0 0.03-2MHz	16 0.02-1.1MHz	60 0.025-1.1MHz	80	EP13	5
ADSL-107	CO	2:2:1:1	0.47	1.1 0.04-2MHz	16 0.2-2MHz	50 0.025-1.1MHz	70	EP13	1
ADSL-108	CO	1.2CT:1CT	3.96	1.1 0.03-1MHz	16.5 0.03-320KHz	50 0.025-1.1MHz	80	EP13	2
ADSL-109	CPE	1CT:1.8CT	3.96	1.0 0.03-1MHz	16 0.03-1.1MHz	50 0.025-1.1MHz	80	EP13	2
ADSL-111	CPE	1:1:1:1	0.41	1.5 0.04-2MHz	16 0.2-2MHz	55 0.025-1.1MHz	80	EP13	3
ADSL-112	CO	1.41CT:1CT	0.48	1.0 0.03-2MHz	16 0.2-1.1MHz	60 0.025-1.1MHz	80	EP13	3
ADSL-113	CPE	3.3CT:1CT	0.80	1.2 0.04-2MHz	15 0.2-2MHz	40 0.025-1.1MHz	80	EP13	4B
ADSL-114	CO	2:2:1:1	0.41	1.1 0.2-2MHz	16 0.2-2MHz	50 0.025-1.1MHz	78	EP13	4
ADSL-115	CPE	2:2:1:1	0.10	1.1 0.2-2MHz	16 0.2-2MHz	50 0.025-1.1MHz	90	EP13	4
ADSL-116	CO/CPE	2:2:1:1	0.44	1.1 0.1-1.1MHz	16 0.2-2MHz	50 0.03-1.1MHz	90	EP13	4B
ADSL-117	CPE	1.8CT:1CT	0.45	1.3 0.03-2MHz	16 0.2-2MHz	60 0.025-1.1MHz	80	EP13	3
ADSL-118	CO	1.41CT:1CT	0.48	1.1 0.1-1.1MHz	16 0.2-1.1MHz	60 0.025-1.1MHz	80	EP13	4
ADSL-119	CO/CPE	1:1:1:1	5.00	1.0 @100KHz	10 0.035-1.1MHz	40 0.025-1.1MHz	80	EP13	1
ADSL-120	CO	2.12CT:1CT	5.00	1.0 @100KHz	10 0.035-1.1MHz	40 0.025-1.1MHz	80	EP13	6
ADSL-121	CO/CPE	5.4CT:1	3.00	0.5 @100KHz	15 40-500KHz	55 20-500KHz	76	EP13	7
ADSL-122	CPE	1:1:1:1	0.41	0.5 @772KHz	16 0.2-1.1MHz	50 0.025-1.1MHz	80	EP13	4
ADSL-124	CO/CPE	2:2:1:1	1.50	0.4 @100KHz	16 0.2-1.1MHz	50 0.025-1.1MHz	80	EP10	8

**Note:** See next page for dimension and schematic. All specifications subject to change without notice.

# DATA COMMUNICATION TRANSFORMER



## ADSL SERIES

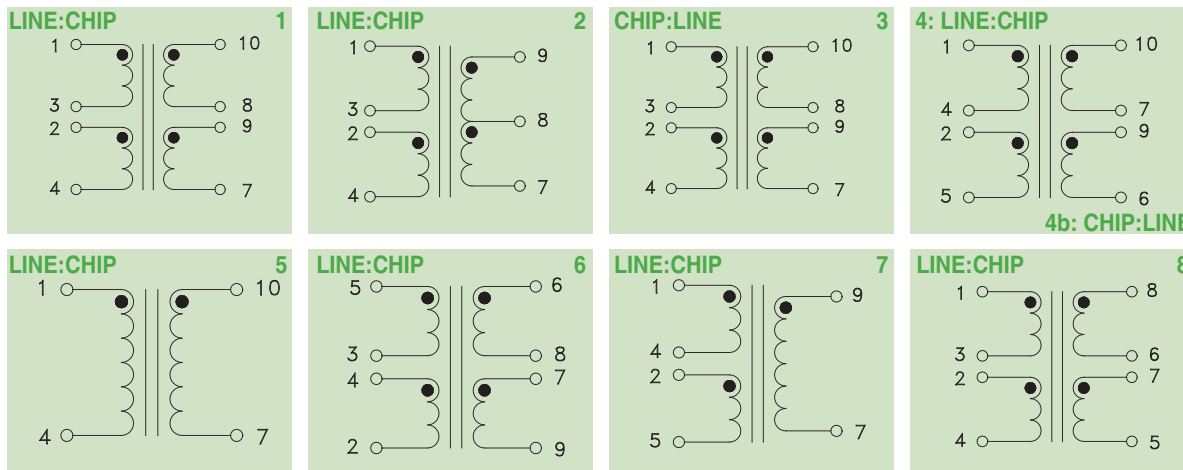
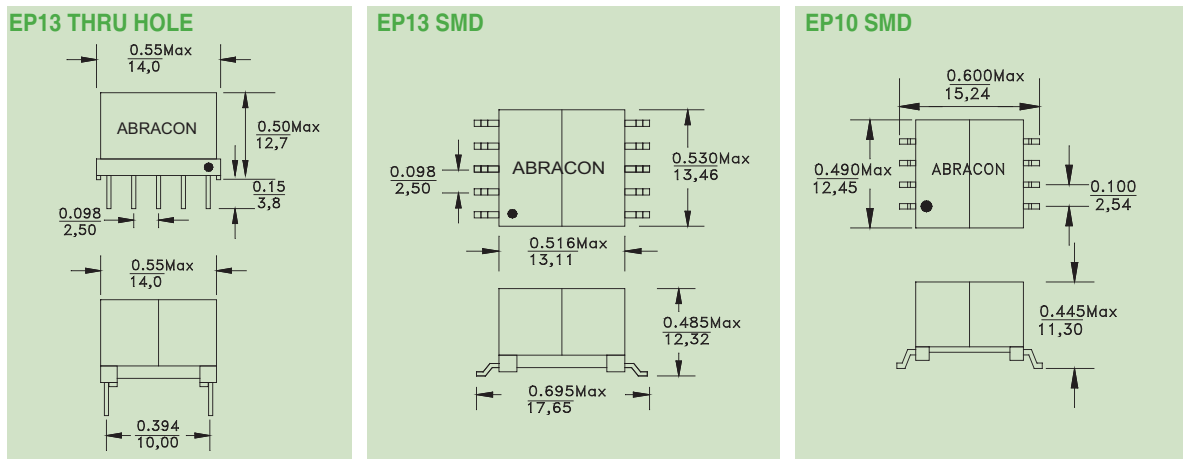
### TEST CONDITIONS:

- A. OCL: 100 mVrms @ 10 KHz with appropriate  $I_{dc} = 60$  mA, Chip-Line
- B. THD: 6 Vp-p @ 30 KHz with 100 $\Omega$
- C. Longitudinal Balance: frequency range specified with 100 $\Omega$
- D. DWV: 1,500 Vrms, greater voltage isolation available
- E. THD: 7.07Vp-p @ 130 KHz with 100 $\Omega$  for ADSL -119, -120
- F. Parametric tests for ADSL 121 performed with line  $Z = 135W$ , Chip  $Z = 4.6\Omega$

### NOTES:

- \* P/Ns with "S" as suffix are configured for surface mountable applications
- \*\* "CT" indicates a center-tapped winding, otherwise readings are intended to be across entire winding segment
- 1. Supports Alcatel MTK 20150/134AFE / DCR < 0.5/0.8  $\Omega$ .
- 2. Supports Alcatel MTK 20140/134AFE / DCR < 1.0/1.0  $\Omega$ .
- 3. Supports Motorola MC145650 (MC03AX1456CO Line Driver) w/ DCR < 4.0/2.2, 2.2  $\Omega$ .
- 4. Supports Motorola MC145650 (MC03AX1456CO Line Driver) w/ DCR < 3.0/1.0, 1.0  $\Omega$ .; IDC = 0
- 5. Supports Analog Devices AD20msp910/918 / DCR < 4.5/4.5  $\Omega$ .
- 6. Supports Globespan 7M640 / DCR < 1.0/1.0  $\Omega$ . and DWV @ 3000 Vrms
- 7. Supports Globespan 7M640 / DCR < 2.4/1.5  $\Omega$ .
- 8. Supports Elantec EL-1501 / DCR < 1.5/1.5  $\Omega$ .
- 9. Supports Alcatel MTK 20131/134AFE / DCR < 1.5/1.5  $\Omega$ .
- 10. Supports Elantec EL-1501 / DCR < 1.0/1.0  $\Omega$ .
- 11. Supports T.I. TNETD3000C/P and BB1302 AFE
- 12. Supports connexant CN9001 circuit #4 (chip:line) pins reversed
- 13. Dimensions: inches / mm; see spec sheet for tolerance limits
- 14. Specifications subject to change without notice

### PHYSICAL CHARACTERISTICS:



ABRACON IS  
ISO 9001 / QS 9000  
CERTIFIED

rev.1.1-8/04

