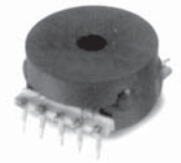


# DATA COMMUNICATION TRANSFORMER

## HDSL SERIES



### FEATURES:

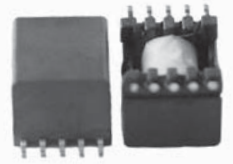
- Supports Industry Standard HDSL/HDSL2 Transceivers
- Conforms to ANSI, ITU and ETSI Standards Requirements
- Operating Temperature Range of -40 C to 85°C
- Meets Standard Dielectric Withstanding Voltage Requirements

### STANDARD SPECIFICATIONS:

Part Number*	Line Rate (Kb/s)	Turns Ratio** (Line:Chip)	OCL (Line)	R <sub>L</sub> @Midband (dB)	I <sub>L</sub> (dB)	Longitudinal Balance (dB)	THD (dB) min	PKG	CIR
AHDL-101	784	1:1:1CT	3.0 mH	≥ 20 40 - 200 KHz	< 1.0 40 KHz	≥ 55 40 - 320 KHz	≤ -70	23x11	2
AHDL-102	1168	1:1:1CT	2.0 mH	≥ 12 40 - 320 KHz	< 1.0 40 KHz	≥ 55 40 - 320 KHz	≤ -70	23x11	3
AHDL-103	784	1:1:2CT	3.0 mH	≥ 20 40 - 200 KHz	< 1.0 40 KHz	≥ 55 5 - 196 KHz	≤ -75	23x11	3
AHDL-104	1168	1:1:1CT	2.0 mH	≥ 16.5 40 - 320 KHz	< 1.0 40 KHz	≥ 55 40 - 320 KHz	≤ -75	23x11	3
AHDL-105	784	1.8CT:1CT	2.8 mH	≥ 20 40 - 200 KHz	< 1.0 40 KHz	≥ 50 5 - 196 KHz	≤ -75	23x11	1
AHDL-106	1168	1:1:1CT	2.0 mH	≥ 16.5 40 - 320 KHz	< 1.0 40 KHz	≥ 55 40 - 320 KHz	≤ -70	23x11	2
AHDL-107	1168	1.8CT	2.06 mH	≥ 16.5 40 - 320 KHz	< 1.0 40 KHz	≥ 50 40 - 320 KHz	≤ -70	23x11	4
AHDL-108	1552	2.3:1	2.0 mH	≥ 18 40 - 320 KHz	< 1.0 40 KHz	≥ 65 40 - 320 KHz	≤ -70	23x11	2
AHDL-109	1168	3:1	2.0 mH	≥ 12 40 - 320 KHz	< 1.0 40 KHz	≥ 65 40 - 320 KHz	≤ -70	23x11	2
AHDL-110	272	1:1:1CT	8.0 mH	≥ 15 9 - 40 KHz	< 1.0 40 KHz	≥ 65 40 - 320 KHz	≤ -70	23x11	3
AHDL-111	416	1:1:1CT	5.0 mH	≥ 16.5 20 - 80 KHz	< 1.0 40 KHz	≥ 65 40 - 320 KHz	≤ -70	23x11	3
AHDL-112	528	1:1:1CT	3.5 mH	≥ 16.5 33 - 200 KHz	< 1.0 40 KHz	≥ 65 40 - 320 KHz	≤ -70	23x11	3
AHDL-201	1168	4:1	2.0 mH	≥ 15.5 40 - 500 KHz	< 1.0 40 KHz	≥ 50 40 - 500 KHz	≤ -80	EP13	2
AHDL-202	784	1:1:1	3.0 mH	≥ 16.5 40 - 320 KHz	< 1.0 40 KHz	≥ 55 40 - 320 KHz	≤ -70	EP13	2
AHDL-203	1168	1:1:1	2.0 mH	≥ 16.5 40 - 320 KHz	< 1.0 40 KHz	≥ 55 40 - 320 KHz	≤ -70	EP13	2
AHDL-204	1168	2.3:1	2.0 mH	≥ 16.5 40 - 320 KHz	< 1.0 40 KHz	≥ 55 40 - 320 KHz	≤ -70	EP13	2
AHDL-205	784	1.8:1CT	3.0 mH	≥ 16.5 40 - 320 KHz	< 1.0 40 KHz	≥ 50 40 - 320 KHz	≤ -70	EP13	2
AHDL-206	2320	1:1:1	1.0 mH	≥ 16.5 80 - 580 KHz	< 1.0 40 KHz	≥ 55 40 - 580 KHz	≤ -70	EP13	2
AHDL-207	1552	2.3:1CT	1.6 mH	≥ 16.5 20 - 560 KHz	< 1.0 40 KHz	≥ 55 20 - 560 KHz	≤ -70	EP13	2
AHDL-211	784	3.7:1	3.0 mH	≥ 14 20 - 500 KHz	< 0.5 40 KHz	≥ 50 40 - 300 KHz	≤ -80	EP13	5

**Note:** See next page. All specifications subject to change without notice.

# DATA COMMUNICATION TRANSFORMER



## HDSL SERIES

### TEST CONDITIONS:

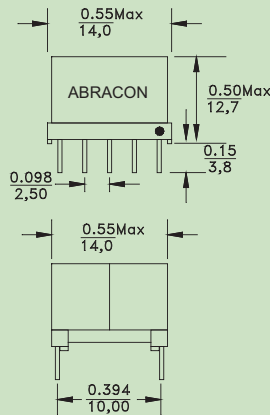
- A. OCL: 100 mVRMS @ 10 KHz with appropriate Idc
- B. THD: 6 Vp-p @ 5 KHz with 135Ω
- C. Longitudinal Balance: frequency range specified with 135Ω
- D. DWV: 1,500 VRMS, greater voltage isolation available

### NOTES:

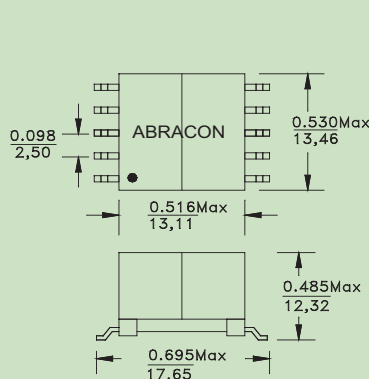
- \* P/Ns with "S" as suffix are configured for surface mountable applications meeting standard industry reflow criteria
- \*\*"CT" indicates a center-tapped winding, otherwise readings are intended to be across entire winding segment
- 1. Supports Level One SK70704/20/21 with DCR ≤ 3.2/6.0 Ω IDC @ 75 mA
- 2. Supports Conexant BT8921/70 with DCR ≤ 2.0/2.0 Ω, IDC @ 70 mA
- 3. Supports Conexant BT8952 with DCR ≤ 2.2/4.4 Ω, IDC @ 160 mA
- 4. Supports Conexant BT8952 with DCR ≤ 2.2/4.4 Ω, IDC @ 160 mA
- 5. Supports Level One SK70740/70741/70742 with DCR ≤ 2.2/2.2 Ω, IDC @ 70mA
- 6. Supports Level One SK70704 with DCR ≤ 3.2/2.0 Ω, IDC @ 75 mA, assumes pins 7-9 shorted externally
- 7. Supports Broadcom BCM6010 and Conexant BT8921/70, assumes pins 2 - 3, 7 - 9 are tied externally
- 8. Supports Conexant BT8960
- 9. Supports Conexant BT8970/RS8973
- 10. Supports M/SHDSL Globespan chip set
- 11. Dimensions: inches / mm; see spec sheet for tolerance limits
- 12. Specifications subject to change without notice

### PHYSICAL CHARACTERISTICS:

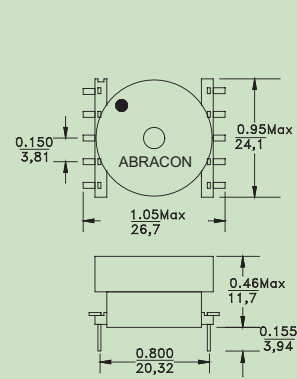
#### EP13 THRU HOLE



#### EP13 SMD

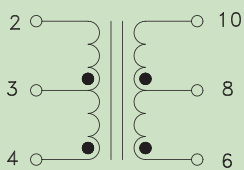


#### 23x11



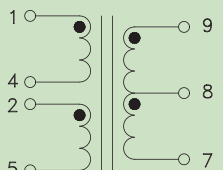
#### CHIP:LINE

1



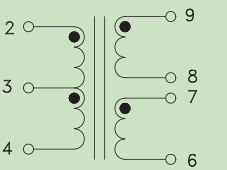
#### LINE:CHIP

2



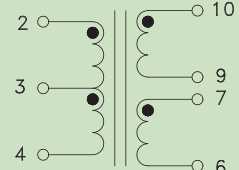
#### CHIP:LINE

3



#### CHIP:LINE

4



#### 4: LINE:CHIP

5

