

MODEL HT81 SERIES

HDSL, HDSL2

Coupling Transformers

NEW PRODUCT



FEATURES AND BENEFITS

- Supports industry standard HDSL transceivers
- Excellent total harmonic distortion characteristics
- Meets standard dielectric withstanding voltage requirements
- Conforms to ANSI, ITU and ETSI standards
- Supports Level One and Conexant (Rockwell) chips
- Operating temperature range of -40°C to +85°C
- Can be customized to meet unique specifications

APPLICATIONS

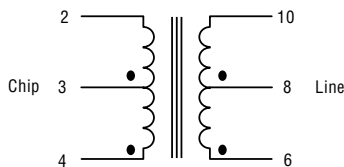
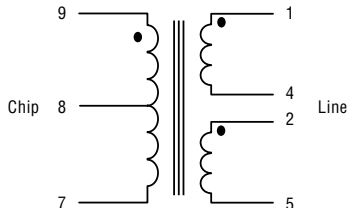
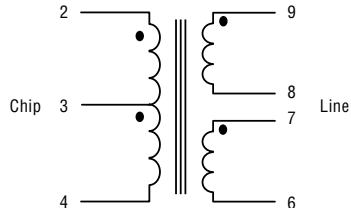
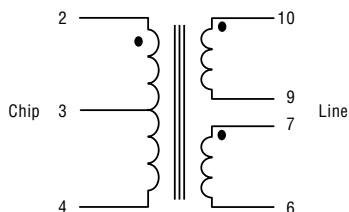
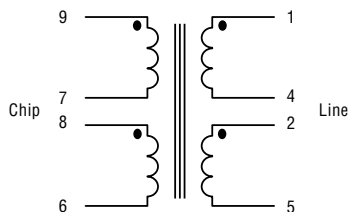
- Designed for 784 Kb/s and 1168 Kb/s applications
- Designs available for multiple data rates
- HDSL coupling transformer

Specifications subject to change without notice.

ELECTRICAL @ 25°C

Part Number	Line Rate Kb/s	Turns Ratio Line-Chip	Open Circuit Inductance Line Side (5) mH Min.	Return Loss @ Mid Band dB Min.	Insertion Loss @ 40kHz dB Max.	Longitudinal Balance (8) dB Min.	THD (6) dB Max.	Fig.	Sch.
HT81-00552 ⁽⁴⁾	2320	1:1:1	1.0	≥16.5 80-580kHz	1.0	55 40-320kHz	-70	2 or 3	2
HT81-00553 ⁽⁴⁾	1552	2.3:1	1.6	≥16.5 20-560kHz	1.0	55 20-320kHz	-70	3	5
HT81-00628 ⁽⁹⁾	272	1:1:1 ct	8.0	≥15 9-40kHz	1.0	65 40-320kHz	-70	1	3
HT81-00629 ⁽⁹⁾	416	1:1:1 ct	5.0	≥16.5 20-80kHz	1.0	65 40-320kHz	-70	1	3
HT81-00630 ⁽⁹⁾	528	1:1:1 ct	3.5	≥16.5 33-110kHz	1.0	65 40-320kHz	-70	1	3
HT81-00631 ⁽⁴⁾	1808	2.3:1	1.3	≥16.5 80-580kHz	1.0	55 40-320kHz	-65	2 or 3	2
HT81-00632 ⁽⁴⁾	2064	2.3:1	1.1	≥16.5 80-580kHz	1.0	55 40-320kHz	-65	2 or 3	2
HT81-00633 ⁽⁴⁾	2320	2.3:1	1.0	≥15.5 80-580kHz	1.0	55 40-320kHz	-70	2 or 3	2
HT81-99628 ⁽¹⁾	784	1.8 ct:1 ct	2.8	≥20 40-200kHz	1.0	50 5-196kHz	-75	1	1
HT81-99647 ⁽²⁾	784	1:1:1 ct	3.0	≥20 40-200kHz	1.0	55 40-320kHz	-70	1	2
HT81-99648 ⁽³⁾	1168	1:1:2 ct	2.0	≥16.5 40-320kHz	1.0	55 40-320kHz	-75	1	3
HT81-99649 ⁽³⁾	784	1:1:2 ct	3.0	≥20 40-200kHz	1.0	50 5-196kHz	-75	1	3
HT81-99650 ⁽⁴⁾	1168	1:1:1 ct	2.0	≥16.5 40-320kHz	1.0	55 40-320kHz	-70	1	2
HT81-99651 ⁽¹⁾	1168	1.8 ct:1 ct	2.06	≥16.5 40-320kHz	1.0	50 40-320kHz	-70	1	4
HT81-99709 ⁽²⁾	1168	1:1:1 ct	2.0	≥12 40-320kHz	1.0	55 40-320kHz	-70	1	3
HT81-99710 ⁽⁴⁾	1552	2.3:1 ct	2.0	≥16.5 40-320kHz	1.0	65 40-320kHz	-70	1	3
HT81-99711 ⁽⁴⁾	1168	3:1 ct	2.0	≥12 40-320kHz	1.0	65 40-320kHz	-70	1	2
HT81-99721 ⁽²⁾	784	1:1:1	3.0	≥16.5 40-320kHz	1.0	55 40-320kHz	-70	2 or 3	2
HT81-99722 ⁽⁴⁾	1168	1:1:1	2.0	≥16.5 40-320kHz	1.0	55 40-320kHz	-70	2 or 3	2
HT81-99723 ⁽⁴⁾	1168	2.3:1	2.0	≥16.5 40-320kHz	1.0	55 40-320kHz	-70	2 or 3	2
HT81-99724 ⁽¹⁾	784	1.8:1 ct	3.0	≥16.5 40-320kHz	1.0	50 40-320kHz	-70	2 or 3	2



Schematic 1

Schematic 2

Schematic 3

Schematic 4

Schematic 5


- Notes: (1) Supports Level One SK70704 with $DCR \leq 3.2/2.0 \Omega$ IDC @ 75mA. Assume pins 7-8 shorted externally.
- (2) Supports Conexant (Rockwell) BT8921, BT8970 with $DCR \leq 2.2/2.2 \Omega$, IDC @ 70mA.
- (3) Supports Conexant (Rockwell) BT8952 with $DCR \leq 2.2/4.4 \Omega$, IDC @ 160mA.
- (4) Supports Level One SK70740, SK70741 and SK70742 HDSL chipset with $DCR \leq 2.2/2.2 \Omega$, IDC @ 70mA.
- (5) OCL tested @ 100mV @ 10kHz with appropriate IDC.
- (6) THD tested @ 5kHz, 6Vp-p with 135 Ω load.
- (7) Supports Level One SK70720 and SK70721 with $DCR \leq 3.0/6.0 \Omega$, IDC @ 75mA.
- (8) Longitudinal balance: frequency range specified with 135 Ω .
- (9) Supports Conexant (Rockwell) BT8960 with $DCR \leq 3.0/3.0 \Omega$, IDC @ 70mA.

OUTLINE DIMENSIONS (Inch/mm)

Figure 1 – Through-Hole

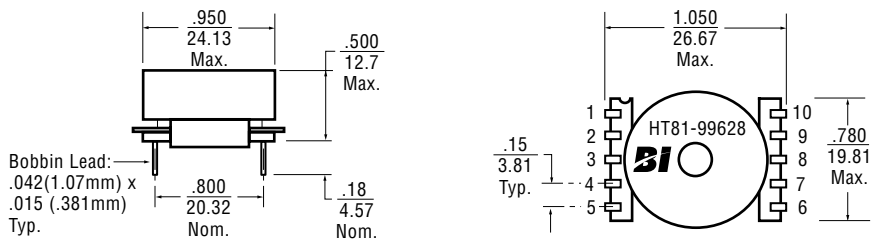
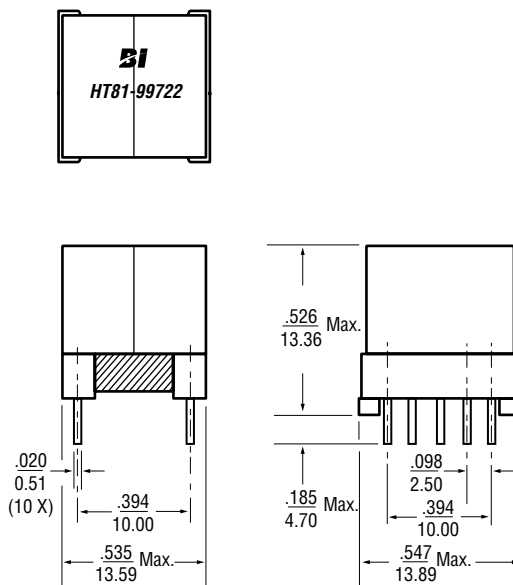
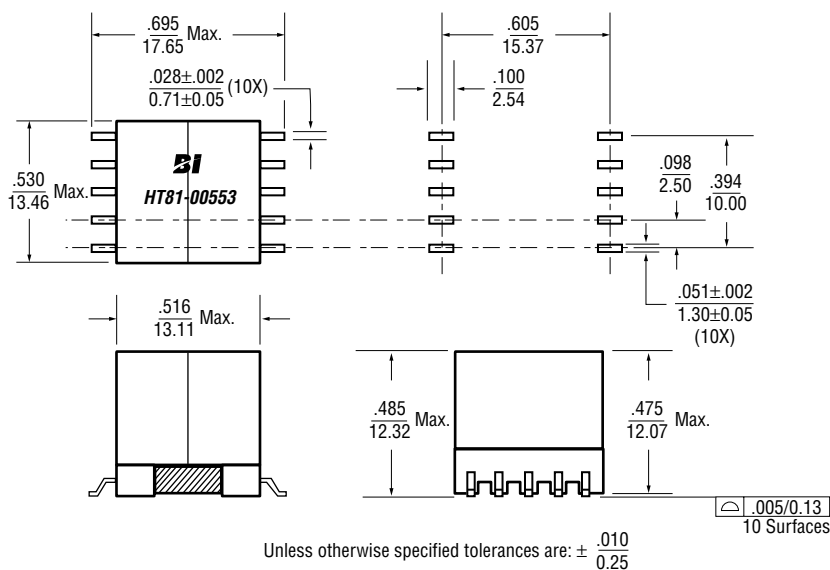


Figure 2 – Through-Hole



OUTLINE DIMENSIONS (Inch/mm)

Figure 3 – Surface Mount



PACKAGING

Standard: Plastic Trays

Capacity	Figure 1	=	45 Units
	Figures 2 & 3	=	60 Units

ORDERING INFORMATION

Model Series: HT81 99628 S
HDSL Transformers
Surface Mount Option
Factory Code (Package/Schematic)