



## HD565 Series HDSL Line Transformers

### Features

- Excellent Total Harmonic Distortion (THD) Performance
- Low leakage inductance and return loss
- High line isolation voltage
- Designed for use with a variety of specific transceiver chips to provide 2B1Q coded data transmission

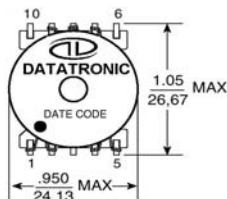


### ELECTRICAL SPECIFICATIONS AT 25°C

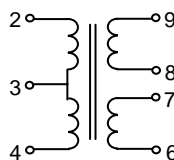
Part Number	Turns Ratio Chip : Line	OCL Primary (mH±6%)	Leakage Inductance (µH MAX)	DCR (Ω) MAX		Data Rate (Kb/s)	Chip set
				Chip side	Line side		
HD565-1	2CT:1:1	3.0	20	4.4(2-4)	2.2(6-7, 8-9)	784	Brooktree BT8952
HD566-1	2CT:1:1	2.0	20	4.4(2-4)	2.2(6-7, 8-9)	1168	Brooktree BT8952
HD567-1	1CT:1:1	3.0	20	2.2(2-4)	2.2(6-7, 8-9)	784	Brooktree BT8921
HD568-1	1CT:1:1	2.0	20	2.2(2-4)	2.2(6-7, 8-9)	1168	Brooktree BT8921
HD569-1	1CT:1.8CTS	2.75	20	3.2(2-4)	3.0(6-8, 8-10)	784	LEVEL ONE SK70704
HD570-1	1CT:1.8CTS	2.06	20	2.0(2-4)	2.0(6-7, 9-10)	1168	LEVEL ONE SK70704

Part Number	Return Loss (dB) MIN	Longitudinal Balance (dB) Typ	DC Bias (mA)	THD (dB) Typ	Dielectric Strength (V) MIN
HD565-1	18.0 @40-200kHz	69 @30kHz 63 @196kHz	160	-74 @100kHz	1500
HD566-1	16.5 @40-320kHz	77 @30kHz 63 @292kHz	160	-74 @100kHz	1500
HD567-1	18.0 @40-200kHz	68 @30kHz 56 @196kHz	80	-74 @100kHz	1500
HD568-1	16.5 @40-320kHz	75 @30kHz 62 @292kHz	80	-74 @100kHz	1500
HD569-1	18.0 @40-200kHz	60 @30kHz 48 @196kHz	80	-75 @5kHz	1500
HD570-1	16.5 @40-320kHz	60 @30kHz 48 @292kHz	80	-74 @5kHz	1500

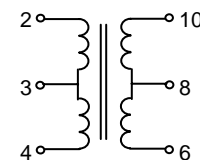
### OUTLINE DIMENSIONS



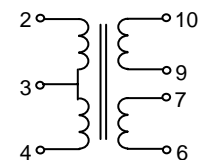
**HD 565-1, HD 566-1  
HD567-1, HD 568-1**



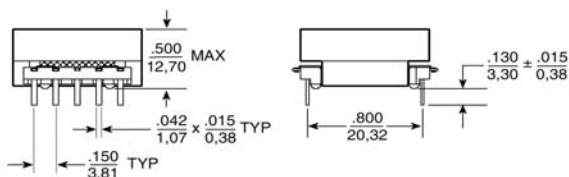
**HD 569-1**



**HD 570-1**



### SCHEMATIC



Dimensions:  $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified, all tolerances are  $\pm \frac{.010}{\sqrt{25}}$

For non-RoHS parts consult factory for special part numbers.