

**HDSL TRANSFORMERS:** Through Hole / Surface Mount / Small Package

- Designs exceed standards for ANSI and ETSI
- Excellent THD performance
- Operating temperature range –40°C to +85°C
- Matched to Brooktree and Level One and metalink's HDSL IC

HDSL Transformer Selection:

Chip Manufacturer	Chip Designation	UMEC Transformer	Configuration	Application
Brooktree	BT8952	UT20621(S)	POT23*11(SMD)	784 kbps (2 pair)
	BT8952	UT20622(S)	POT23*11(SMD)	1168 kbps (2pair)
	BT8921	UT20300(S)	POT23*11(SMD)	784 kbps (2 pair)
	BT8921	UT20301(S)	POT23*11(SMD)	1168 kbps (2pair)
	BT8960	UT20001(S)	POT23*11(SMD)	416 kbps
	BT8960	UT20002(S)	POT23*11(SMD)	288 kbps
	BT8960	UT20004(S)	POT23*11(SMD)	160 kbps
	BT8960	UT67912(S)	EP13(SMD)	288 kbps
	BT8921 &BT8970	UT67928(S)	EP13(SMD)	1168 kbps
	BT8921 &BT8970	UT67929(S)	EP13(SMD)	784 kbps
	BT8960	UT67930(S)	EP13(SMD)	416 kbps
	BT8960	UT67931(S)	EP13(SMD)	160 kbps
	Level One	SK70704	UT20614(S)	POT23*11(SMD)
SK70704		UT20650(S)	POT23*11(SMD)	1168 kbps (2pair)
SK70704		UT67182	EE19	
SK70720		UT20102(S)	POT23*11(SMD)	784 kbps
SK70721				
Metalink	MTH1640B	UT67699(S)	POT 23*11(SMD)	
	MTH1440B			
	MTH1240B			
	MTH840B			
	MTH2440B	UT67719	EFD20	
	MTH2040B			
	MTH1640B			
	MTH1440B			
	MTH1240B			
	MTH840B			

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**HDSL TRANSFORMERS:** Through Hole / Surface Mount / Small Package
ELECTRICAL SPECIFICATION @25°C

PART NO.	Turns Ratio (Line:Chip) (±2%)	Line Side Inductance (mH)	DC BIAS (mA max)	Leakage Inductance (uH max)	DCR Line Side (Ω max)	DCR Chip Side (Ω max)	Isolation (Vrms)	Package & Schematic
UT20621(S)	1SPLIT:1CT	3.0±6%	160	16	4.4	4.4	1500	A (B) / S1
UT20622(S)	1SPLIT:1CT	2.0±6%	160	16	4.4	4.4	1500	A (B) / S1
UT20300(S)	2SPLIT:1CT	3.0±6%	70	8	4.4	2.2	1500	A (B) / S1
UT20301(S)	2SPLIT:1CT	2.0±6%	70	8	4.4	2.2	1500	A (B) / S1
UT67928(S)	2SPLIT:1	2.0±6%	160	11	2.5	1.0	1500	C (D) / S4
UT67929(S)	2SPLIT:1	3.0±6%	160	-	2.5	1.0	1500	C (D) / S4
UT20614(S)	1.8CT:1CT	2.75±6%	75	-	6.0	3.2	2000	A (B) / S2
UT20650(S)	1.8SPLIT:1CT	2.06±6%	75	-	4.0	2.0	2500	A (B) / S3
UT20102(S)	1.8SPLIT:1	0.9±10%	150	50	6.0	3.2	1500	A (B) / S8
UT67699(S)	2.3SPLIT:1	3.6±10%	60	10	1.0	0.5	1500	A(B) / S7
UT67719	2.3SPLIT:1	3.6±10%	60	-	1.0	0.5	1500	E / S6
UT20001(S)	2SPLIT:1CT	3.5±10%	70	12	4.4	2.2	1500	A (B) / S1
UT20002(S)	2SPLIT:1CT	5.0±10%	70	12	5.0	2.5	1500	A (B) / S1
UT20004(S)	2SPLIT:1CT	8.0±10%	70	16	6.0	3.0	1500	A (B) / S1
UT67912(S)	2SPLIT:1	5.0±5%	60	-	3.5	2.2	1500	C (D) / S4
UT67930(S)	2SPLIT:1	3.5±5%	60	-	2.5	1.0	1500	C (D) / S4
UT67931(S)	2SPLIT:1	8.0±6%	60	-	4.0	2.3	1500	C (D) / S4
UT67182	1.8SPLIT:1	1.96±10%	-	12	2.35	0.75	1500	F/S5

Inductance : the inductance of windings on line side in series (at 10KHz 100mV).

Leakage inductance : the leakage inductance of windings on line side with windings
on chip side shorted (at 100KHz 100mV).**ADDITIONAL INFORMATIONS:**

PART NO.	RETURN LOSS (dB min)			LONGITUDINAL BALANCE (135 Ω)	THD (TYP) (14dBm,135Ω)
	4KHz, 2MHz	40- -200KHz	40- -320KHz		
UT20621(S)	4.0	20.0	-	55dB TYP @ 196KHz	-75dB @ 200KHz
UT20622(S)	4.0	-	16.5	55dB TYP @ 292KHz	-75dB @ 200KHz
UT20300(S)	4.0	20.0	-	55dB TYP @ 196KHz	-75dB @ 200KHz
UT20301(S)	4.0	-	16.5	55dB TYP @ 292KHz	-75dB @ 200KHz
UT69928(S)	-	-	16.5	50dB MIN @ 5-300KHz	-70dB @ 40KHz
UT67929(S)	-	20.0	-	53dB MIN @ 4-200KHz	-70dB @ 40KHz
UT20614(S)	-	20.0	-	50dB MIN @ 5-196KHz	-75dB @ 5KHz
UT20650(S)	-	-	16.5	50dB MIN @ 5-292KHz	-75dB @ 5KHz
UT20102(S)	-	20.0	-	50dB MIN @ 5-196khZ	-70dB @ 5KHz
	25- -317KHz	36- -600KHz			
UT67699(S)	16.0	-		50dB min. @ 36Hz-300KHz	-50dB @ 300KHz
UT67719	-	16.0		50dB min. @ 36Hz-300KHz	-60dB @ 5KHz
	9- -40KHz	20- -80KHz	33- -110KHz		
UT20001(S)	-	-	16.5	55dB TYP @ 104KHz	-70dB @ 104KHz
UT20002(S)	-	16.5	-	55dB TYP @ 72KHz	-70dB @ 80KHz
UT20004(S)	16.5	-	-	55dB MIN @ 40KHz	-70dB @ 40KHz
UT67912(S)	-	17.0	-	53dB MIN @ 5-150KHz	-70dB @ 20KHz
UT67930(S)	-	-	17.0	53dB MIN @ 5-150KHz	-70dB @ 20KHz
UT67931(S)	16.0	-	-	53dB MIN @ 5-150KHz	-70dB @ 20KHz

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