

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 TRANSFORMERS 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)	784 kbps(2 pair)
	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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ELECTRICAL SPECIFICATION @25°C

MODEL 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 INFORMATION

MODEL NO.	RETURN LOSS (dB min)			LONGITUDINAL BALANCE (135Ω)	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
UT67928(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
UT20002(S)	-	16.5	-	55dB TYP @ 72KHz	-70dB @ 80KHz
	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
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

DATA SHEET 02-20 JUL./04
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