

T1/E1/CEPT/ISDN-PRI TRANSFORMERS

Link-PP Int'l Technology

- ✳ Quad port SMT package with 8 transformers
- ✳ Isolation voltage :1500 Vrms
- ✳ For RoHS part add suffix NL
- ✳ RoHS "NL" peak solder rating 235°C



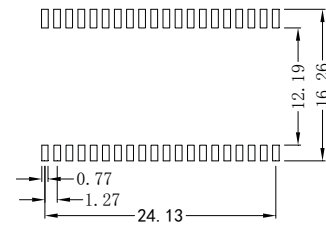
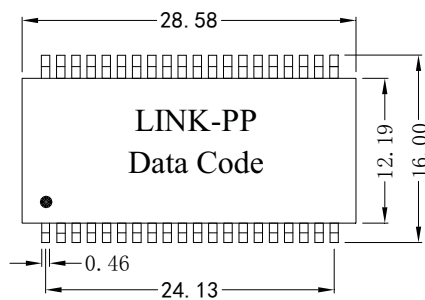
Electrical Specifications @ 25°C

Part Number		Turns Ratio (Prussic ±2%)		OCL @ 25°C (mH MIN) ^f		L _L (μH MAX)		C _{WW} (pF MAX)		Package/Schematic	Primary Pins	
STD Temp	EXTemp.	TX	RX	TX	RX	TX	RX	TX	RX		TX	RX
LPB81063	LPB81103	1:1.36	1:1.36CT	1.2	1.2	.6	.6	35	35	TE9/1	1-2,6-7,11-12,16-17	38-36,33-31,28-26,23-21
LPB81064	LPB81104	1:1.14	1:1.14CT	1.2	1.2	.6	.6	35	35	TE9/1	1-2,6-7,11-12,16-17	38-36,33-31,28-26,23-21
LPB81065	LPB81105	1:2CT	1:2CT	1.2	1.2	.8	.8	35	35	TE9/3	4-5,9-10,14-15,19-20	24-25,29-30,34-35,39-40
LPB81066	LPB81106	1:2	1:2CT	1.2	1.2	.6	.6	35	35	TE9/4	1-2,9-10,11-12,19-20	23-25,26-28,33-35,36-38
LPB81067	LPB81107	1:1.36CT	1:2CT	1.2	1.2	.6	.6	35	35	TE9/3	24-25,29-30,34-35,39-40	4-5,9-10,14-15,19-20
LPB81068	LPB81108	1:2CT	1:1CT	1.2	1.2	.6	.6	35	35	TE9/2	1-2,6-7,11-12,16-17	21-22,26-27,31-32,36-37
LPB81069	LPB81109	1CT:1.41	1CT:1.41	1.2	1.2	.6	.6	35	35	TE9/3	1-3,6-8,11-13,16-18	21-23,26-28,31-33,36-38
LPB81070	LPB81110	1:1.15	1:2CT	1.2	1.2	.6	.6	35	35	TE9/1	1-2,6-7,11-12,16-17	21-23,26-28,31-33,36-38
LPB81071	LPB81111	1:1/1.26	1:2CT	1.2	1.2	.6	.6	35	35	TE9/2	1-2,6-7,11-12,16-17	21-22,26-27,31-32,36-37
LPB81072	LPB81112	1:1.15	1:1.15	1.2	1.2	.6	.6	35	35	TE9/5	1-3,6-8,11-13,16-18	4-5,9-10,14-15,19-20
LPB81073	LPB81113	1:2	1:2	1.2	1.2	.6	.6	35	35	TE9/5	1-3,6-8,11-13,16-18	4-5,9-10,14-15,19-20
LPB81078	-	1:1.08	1.08CT:1	1.2	1.2	.4	.5	35	35	TE9/1	1-2,6-7,11-12,16-17	38-36,33-31,28-26,23-21
LPB81124	LPB81114	1:2CT	1CT:2	1.2	1.2	.6	.6	35	35	TE9/3	4-5,9-10,14-15,19-20	1-3,6-8,11-13,16-18
LPB81125	-	1:1.70	1:1.36CT	1.2	1.2	.8	.6	35	35	TE9/1	1-2,6-7,11-12,16-17	21-23,26-28,31-33,36-38
LPB81129	-	1:1.36CT	1:1CT	1.2	1.2	.6	.6	35	35	TE9/3	24-25,29-30,34-35,39-40	4-5,9-10,14-15,19-20
LPB81142	LPB81231	1:2.4	1:1	1.0	1.0	.5	.5	35	35	TE9/6	1-2,8-9,11-12,18-19	24-25,27-28,34-35,37-38
-	LPB81226	1:1.5	1.41:1	1.0	1.0	.5	.5	35	35	TE9/6	1-2,8-9,11-12,18-19	24-25,27-28,34-35,37-38
LPB81145	-	1:2/2.4	1:0.79/1	1.0	1.0	1.0	1.0	35	35	TE9/7	1-2,9-10,11-12,19-20	37-36,35-34,27-26,25-24
LPB81180	-	1:2.42	1:2.42	1.2	1.2	.6	.6	35	35	TE9/5	1-3,6-8,11-13,16-18	4-5,9-10,14-15,19-20
LPB81181	-	1:2.1CT	1:2.1CT	1.2	1.2	.6	.6	35	35	TE9/2	1-2,6-7,11-12,16-17	21-22,26-27,31-32,36-37
LPB81182	-	1:2.45CT	1:2.45CT	1.2	1.2	.6	.6	35	35	TE9/2	1-2,6-7,11-12,16-17	21-22,26-27,31-32,36-37
-	LPB81262	1:2	1:2	1.2	1.2	.7	.7	35	35	TE9/6	1-2,6-7,11-12,16-17	3-4,8-9,13-14,18-19
-	LPB81264	1:2CT	1CT:1	1.2	1.2	.6	.6	35	35	TE9/3	4-5,9-10,14-15,19-20	1-3,6-8,11-13,16-18
-	LPB81292	1:1.36	1:1	1.2	1.2	.6	.6	40	40	TE9/5	1-3,6-8,11-13,16-18	4-5,9-10,14-15,19-20
-	LPB81294	1:1CT	1:1CT	1.2	1.2	.6	.6	35	35	TE9/3	4-5,9-10,14-15,19-20	24-25,29-30,34-35,39-40
-	LPB81295	1:1.26	1:1.26CT	1.2	1.2	.6	.6	35	35	TE9/3	4-5,9-10,14-15,19-20	24-25,29-30,34-35,39-40
-	LPB81298	1:1	1:1	1.2	1.2	.7	.7	35	35	TE9/5	1-3,6-8,11-13,16-18	4-5,9-10,14-15,19-20

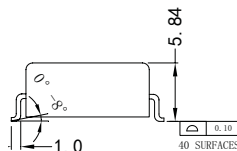
1. Add suffix NL RoHS compliant parts, eg: LPB81063 changes to LPB81063NL

Mechanical

TE9



SUGGESTED PAD LAYOUT

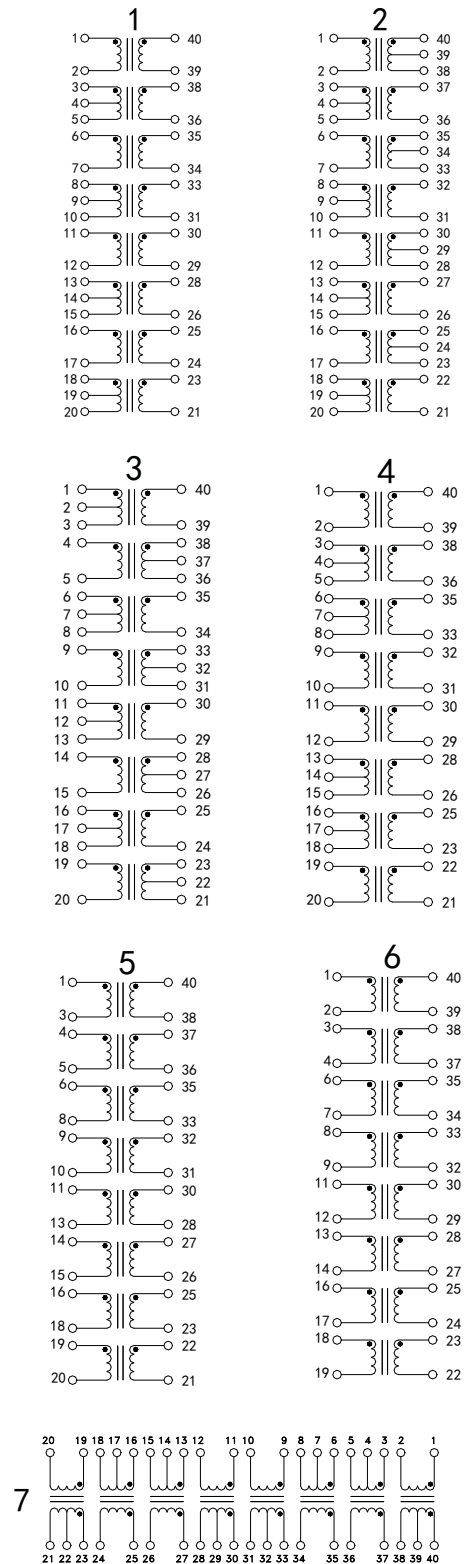


※Quad Port T1/E1 with 8 Transformers ,1500 Vrms

Transformer Selection Guide

IC Mfr.	IC P/N	Comments	Octal SMT	
			STD temp	EXT temp
Mindspeed (Conexant)	BT8510	T1/E1	LPB81071	LPB81111
	BT8510	T1/E1	LPB81071	LPB81111
	CN8380		LPB81124	LPB81114
	BT8370/5/6	Better RI	LPB81067	LPB81107
	BT8370/5/6	Low Power	LPB81070	LPB81110
Cirrus Logic (Crystal)	61318	120 E1	LPB81068	LPB81108
	61577	T1&E1	LPB81065	LPB81105
	61304A/5A/535A/574A,/75	T1	LPB81070	LPB81110
	61304A/5A/535A/574A,/75	75 E1	LPB81068	LPB81108
	61304A/5A/535A/574A,/75	120 E1	LPB81071	LPB81111
	61582,61583		LPB81064	LPB81104
	61310,61581		LPB81068	LPB81108
	61881		LPB81070	LPB81110
	61584/84A	IQ3	LPB81065	LPB81105
	61584/82/83/A	IQ5	LPB81064	LPB81104
Maxim (Dallas)	DS2196		LPB81068	LPB81108
	DS2151/2152/2153/2154		LPB81070	LPB81110
	DS2151/2152/2153/2154		LPB81067	LPB81107
	DS2148/Q48	3V	LPB81068	LPB81108
	DS2148/Q48	5V	LPB81067	LPB81107
	DS21352/Q352,DS21354/Q354		LPB81068	LPB81108
	DS21552/Q552,DS21554/Q554		LPB81070	LPB81110
DS21552/Q552,DS21554/Q554		LPB81067	LPB81107	
Exar	T5683A,59L91		LPB81065	LPB81105
	T5894,T5897,T5997		LPB81065	LPB81105
	T5791/93/94/95		LPB81071	LPB81111
	81L27,82L24,82D20		LPB81067	LPB81107
	83L30/34/38		LPB81065	LPB81105
	T5684,T7288,82D20		LPB81067	LPB81107
Infineon Technologies (Siemens)	PEB 2254/55	E1/T1&J1	LPB81069	LPB81109
	PEB 2254/55	E1/T1&J1	LPB81069	LPB81109
	PEB 22504	3.3V	LPB81142	LPB81231
	PEB 22504	5V	LPB81226	LPB81226
	PEB 22554	3.3V	LPB81142	LPB81231
	PEB 2256 3.3V	E1/T1/J1	LPB81142	LPB81231
Intel (Level One)	LXT300/301		LPB81065	LPB81105
	LXT304/305/307	T1,E1	LPB81065	LPB81105
	LXT304/305/307	T1	LPB81070	LPB81110
	LXT304/305/307	75E1,120E1	LPB81071	LPB81111
	LXT310/317/318		LPB81068	LPB81108
	LXT331	T1,E1	LPB81068	LPB81108
	LXT331,LXT332		LPB81065	LPB81105
	LXT331,LXT332		LPB81070	LPB81110
	LXT334,LXT335	T1/E1	LPB81065	LPB81105
	LXT334,LXT335	120/75 E1	LPB81067	LPB81107
	LXT334,LXT335	75 E1	LPB81071	LPB81111
	LXT336		LPB81065	LPB81105
	LXT350,LXT351,LXT359	T1,E1	LPB81068	LPB81108
	LXT350,LXT351		LPB81070	LPB81110
	LXT360/361/362/363	T1,E1	LPB81068	LPB81108
LXT360/361/362/363		LPB81070	LPB81110	
LXT380/381/384/386/388	T1,E1	LPB81068	LPB81108	
LXT380/381/384/386/388	T1,E1	LPB81124	LPB81114	
LXT3104,LXT3108		LPB81068	LPB81108	
Lucent Technologies	T7288,T290A	CEPT	LPB81067	LPB81107
	T7289A	DS1	LPB81070	LPB81110
	T7688,T7690,T7698	CEPT	LPB81063	LPB81103
	T7689,T7690,T7698	DS1	LPB81064	LPB81104
	T7693,T7697	CEPT	LPB81180	
	TLIU04C1	DS1	LPB81064	LPB81104
	TLIU04C1	CEPT	LPB81063	LPB81103
Zarlink (Mitel)	MT9071,MT9076		LPB81180	
	MT9076,MT9075		LPB81142	LPB81231
	MT9074,MT9075		LPB81068	LPB81108
PMC-Sierra	PM4341/6341/4314		LPB81067	LPB81107
	PM4318		LPB81065	LPB81105
	PM4351/4354	COMET	LPB81180	LPB81299

Schematics



Common Mode Chokes For Telecom Application

Link-PP Int'l Technology

※Quad Port T1/E1 with 8 Transformers ,1500 Vrms

Electrical Specifications@ 25°C ---- Operating Temperature 0°C to 70°C

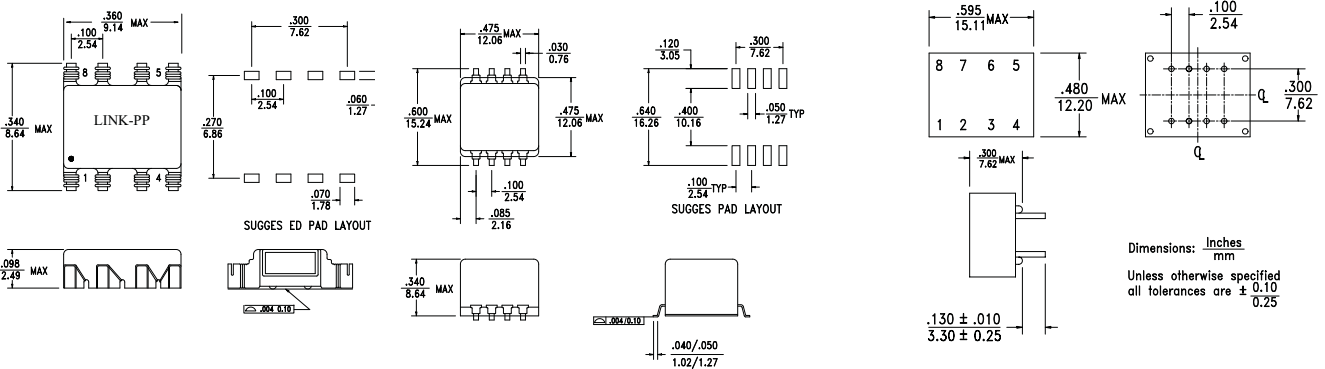
Part Number	Number of Lines	Turns Ratio (±5%)	OCL (μH MIN)	C _{WW} (pF MAX)	L _L (μH MAX)	DCR (Ω MAX)	Isolation (Vrms MIN)	Package/ Schematic
HIGH FREQUENCY COMMON MODE CHOKES								
LPB88008	16(8×2line)	1:1(8places)	47.0	25	.18	0.40	500	TE9/B(SMT)
LPB85554	4	1:1:1:1	24.0	15	.20	0.30	500	CMC6/A(THT)
LPB85555	4	1:1:1:1	8.0	10	.20	0.25	500	CMC6/A(THT)
LPB85854	4	1:1:1:1	47.0	16	.20	0.30	500	CMC4/A(SMT)
LPB85857	4	1:1:1:1	24.0	15	.23	0.30	500	CMC5/A(SMT)

Mechanicals

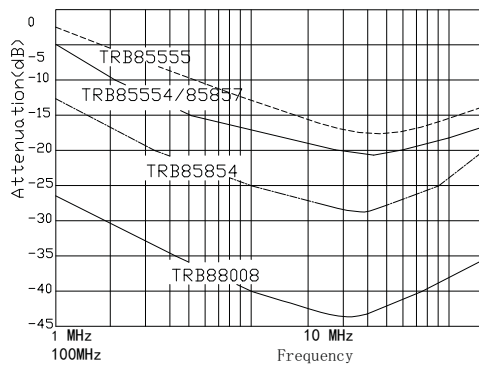
CMC4

CMC5

CMC6



Schematics



Typical common mode attenuation for high frequency common mode chokes based on a 100 Ω system.

