ISDN U_{KO}-INTERFACE TRANSFORMER

- The U_{KO}-Interface is used to connected the ISDN Public Exchang and Network Termination (NT's).
- The U_{KO}-Interface transmission code 4B3T and 2B1Q when consumer use the ISDN chips of different meanufacturers on the personal application.

ISDN-IC/U_{KO}-Interface Transformer Selection

Chip Manufacturer	Chip Designation	UMEC Transformer	Configuration	Transmission Code
Infineon (Siemens)	PEB2090	UT21902	RM6 6PIN	4B3T
		UT21904	RM6 8PIN DUAL	
		UT21907	RM6 8PIN DUAL	
		UT21942	RM8	
		UT21945	RM8	
		UT21972	RM6 8PIN DUAL	
	PEB2091	UT21901	RM6 6PIN	2B1Q
		UT21906	RM6 8PIN DUAL	
		UT21910	RM8 12PIN DUAL	
		UT21954	RM8	
		UT21958	RM8	
		UT21963	RM6 8PIN DUAL	
		UT35473	POT 18*11	
AMD	AM20901	UT21901	RM6 6PIN	2B1Q
		UT21906	RM6 8PIN DUAL	
		UT21963	RM6 8PIN DUAL	
	AM20902	UT21902	RM6 6PIN	4B3T
		UT21904	RM6 8PIN DUAL	
		UT21907	RM6 8PIN DUAL	
		UT21972	RM6 8PIN DUAL	
Motorola	MC145472	UT20579	POT 23*11	2B1Q
		UT21960	RM8	
	MC145572	UT20628	POT 23*11	2B1Q
		UT21001	RM8	
		UT21903	RM6 8PIN DUAL	
		UT21905	RM8	
AT&T	T7262 T7263	UT21961	RM8	2B1Q
	T7256 T7264	UT21921	POT 23*11	2B1Q
		UT21921A	POT 23*18	
		UT21924	RM8	
	T7234 T7237 T7256 T7264	UT21928	EP20	2B1Q
National	TP3410	UT20583	POT 23*11	2B1Q
		UT21911	RM6 8PIN DUAL	
		UT21913	RM6 8PIN DUAL	
		UT21917	RM8 12PIN DUAL	
		UT21959	RM8	
SGS Thomson	ST5410	UT20583	POT 23*11	2B1Q
		UT21911	RM6 8PIN DUAL	
		UT21913	RM6 8PIN DUAL	
		UT21917	RM8 12PIN DUAL	
		UT21959	RM8	
	ST5411	UT20583	POT 23*11	2B1Q
		UT21911	RM6 8PIN DUAL	
		UT21913	RM6 8PIN DUAL	
		UT21917	RM8 12PIN DUAL	
		UT21959	RM8	

UNIVERSAL MICROELECTRONICS CO.,LTD. *3,27TH RD.,TAICHUNG INDUSTRIAL PARK,*
TEL:886-4-23590096 FAX:886-4-23590129 *TAICHUNG,TAIWAN,R.O.C*

ISDN U_{KO}-INTERFACE TRANSFORMER

ELECTRICAL SPECIFICATION @25^{0}C

UMEC MODEL NO.	Turns Ratio (Line:Chip) (±2%)	Line Side Pins	Line Side Inductance (mH)	DC BIAS (mA max)	Leakage Inductance (uH)	Coupling capacitance (pF)	DCR Line Side (Ω)	DCR Chip Side (Ω)	Isolation	Package & Schematic
UT20583	1.5:1	(4-2)	28.0 ± 5%	60			20.0 max.	3.0 max.	2000 Vac	POT 23*11/C
UT20628	1.25:1	(1-5)	28.0 ± 5%	80			12.0 max.	7.0 max.	2000 Vac	POT 23*11/C
UT20628A	1.25:1	(1-5)	28.0 ± 5%	80			12.0 max.	9.0 max.	2000 Vac	POT 23*18/B
UT20631	1.5:1	(4-2)	27.0 ± 5%	60			20.0 max.	3.0 max.	2500 Vac	POT 23*11/C
UT21001	1.25:1	(8-6)	27.0 ± 8%	90	150 max.	150 max.	6.0 nom.	3.9 nom.	2000 Vac	RM8/F
UT21901	1.6:1	(2-5)	14.5 ±10%	50	71 max.	150 max.	5.6 ±15%	4.1 ±15%	500 Vac	RM6/H
UT21902	1.32:1	(2-5)	5.5 ±10%	50	22 max.	125 max.	3.3 ±15%	2.85 ±15%	500 Vac	RM6/H
UT21903	1.25:1	(1-4)	28.0 ± 5%	50	120 max.	80 max.	12.0 max.	9.0 max.	2000 Vac	RM6/G
UT21904	1.32:1	(5-8)	7.6 ± 8%	55	50 max.	75 max.	2.4 max.	2.7 max.	2000 Vac	RM6/G
UT21905	1.25:1	(1-11)	28.0 ± 5%	80	60 max.		10.0 max.	5.0 max.	2000 Vac	RM8/F
UT21906	1.6:1	(1-4)	13.3 ±10%	60	45 max.	70 max.	5.0 max.	5.0 max.	2000 Vac	RM6/G
UT21907	1.32:1	(1-4)	7.7 ±10%	60	40 max.	45 max.	3.8 max.	3.8 max.	2000 Vac	RM6/G
UT21910	1.6:1	(8-11)	14.5 ±10%	60	90 max.	100 max.	2.7 max.	2.8 max.	2500 Vac	RM8/E
UT21911	1.5:1	(1-4)	27.0 ±10%	40	150 max.	150 max.	14.8 max.	11.1 max.	2500 Vac	RM6/G
UT21913	1.5:1	(1-4)	27.0 ± 5%	60			20.0 max.	3.0 max.	2000 Vac	RM6/G
UT21917	1.5:1	(2-5)	27.0 ±10%	90	150 max.	350 max.	18.0 max.	7.5 max.	3750 Vdc	RM8/E
UT21921	1.5:1	(9-7)	81.5 ± 5%	30	100~172		10.3 nom.	21.3 nom.	1500 Vac	POT 23*11/C
UT21921A	1.5:1	(9-7)	81.5 ± 5%	30	100~172		6.81 ±15%	12.3 ±15%	1500 Vac	POT 23*18/B
UT21924	1.5:1	(2-12)	80.0 ±10%	80	160 max.		13.8 max.	11.8 max.	2000 Vac	RM8/F
UT21928	1.5:1	(1-5)	81.5 ± 5%	30	180 max.	250 max.	12.3~15.2	9.2~11.3	4000 Vac	EP20/D
UT21942	1.32:1	(8-6)	14.5 ±10%	60	55 max.	60 max.	1.8 nom.	2.8 nom.	2000 Vac	RM8/F
UT21945	1.32:1	(8-6)	7.9 ±10%	60	50 max.	75 max.	1.3 nom.	1.9 nom.	2000 Vac	RM8/F
UT21954	1.6:1	(8-6)	14.5 ±10%	60	90 max.	100 max.	2.7 nom.	2.8 nom.	2000 Vac	RM8/F
UT21958	1.6:1	(8-6)	14.5 ±10%	60	100 max.	90 max.	2.7 nom.	2.8 nom.	2500 Vac	RM8/F
UT21959	1.5:1	(8-6)	27.0 ±10%	90	150 max.	150 max.	6.0 nom.	3.9 nom.	2000 Vac	RM8/F
UT21960	2:1	(1-11)	27.0 ± 5%	80	150 max.	180 max.	6.2 nom.	2.7 nom.	2000 Vac	RM8/F
UT21961	2.5:1	(8-6)	14.5 ±10%	60	100 max.	100 max.	2.7 nom.	1.8 nom.	2000 Vac	RM8/F
UT21963	1.6:1	(1-4)	13.3 ±10%	60	70 max.	90 max.	4.9 nom.	4.8 nom.	2000 Vac	RM6/G
UT21972	1.32:1	(1-4)	6.9 ±10%	60	70 max.	65 max.	4.5 nom.	3.4 nom.	2000 Vac	RM6/G
UT35473	1.65:1	(1-4)	15.5 ±16%	50	75 max.		5.0 max.	3.0 max.	2000 Vdc	POT 18*11/A

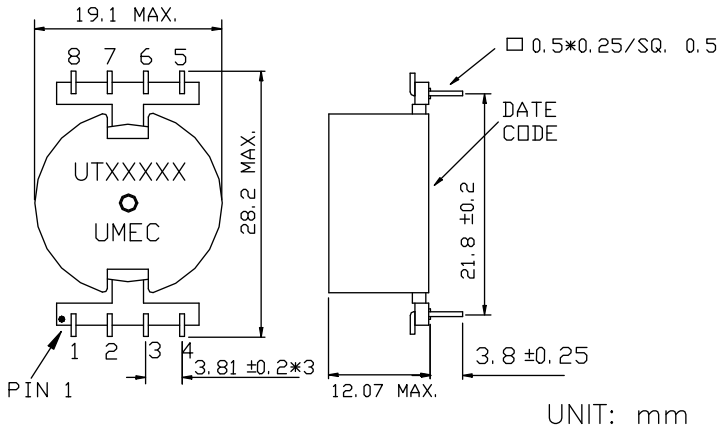
- Inductance : the inductance of windings on line side in series (at 10KHz 100mV).
- Coupling capacitance : the coupling capacitance between of windings on line side and the windings on chip side (at 10KHz 100mV).
- Leakage inductance : the leakage inductance of windings on line side with windings on chip side shorted (at 100KHz 100mV).

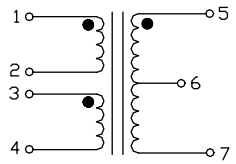
*Specifications are subject to change without prior notice.

UNIVERSAL MICROELECTRONICS CO.,LTD. *3,27TH RD.,TAICHUNG INDUSTRIAL PARK,*
TEL:886-4-23590096 FAX:886-4-23590129 *TAICHUNG,TAIWAN,R.O.C*

ISDN U_{KO}-INTERFACE TRANSFORMER

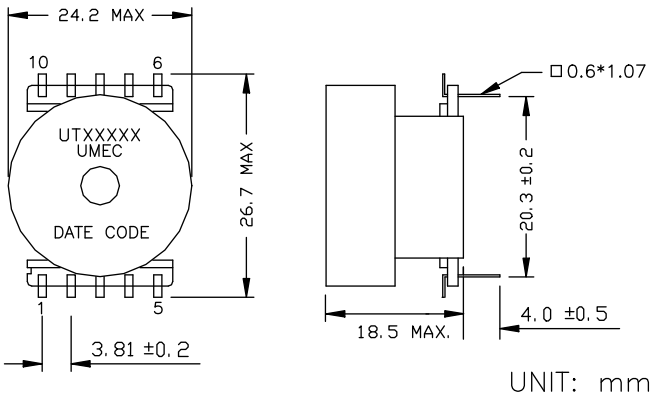
A POT 18*11

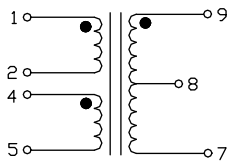




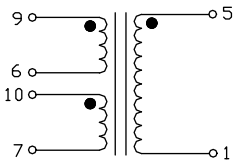
UT35473

B POT 23*18



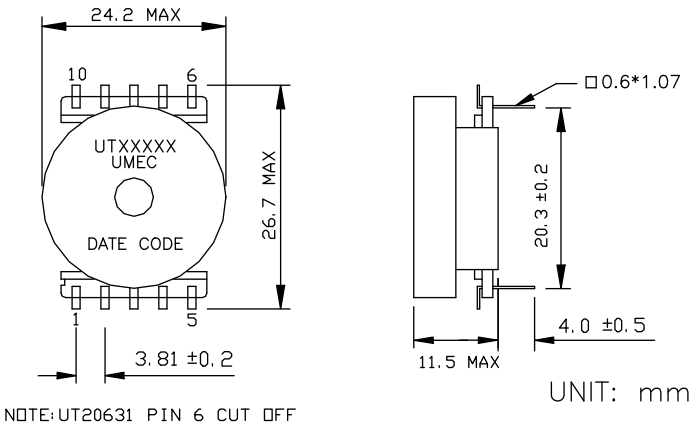


UT20628A

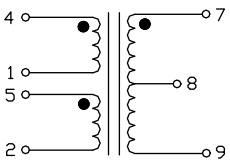


UT21921A

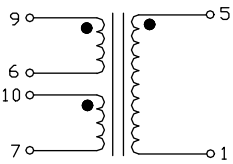
C POT 23*11



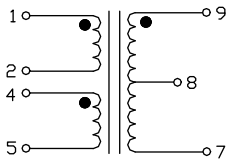
NOTE:UT20631 PIN 6 CUT OFF



UT20583
UT20631



UT21921

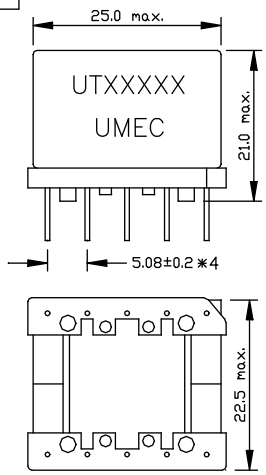


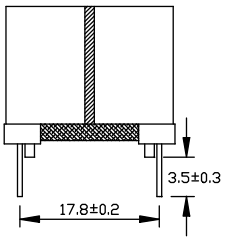
UT20628

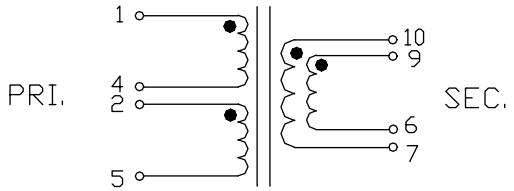
UNIVERSAL MICROELECTRONICS CO.,LTD. *3,27TH RD.,TAICHUNG INDUSTRIAL PARK,*
TEL:886-4-23590096 FAX:886-4-23590129 *TAICHUNG,TAIWAN,R.O.C*

ISDN U_{KO}-INTERFACE TRANSFORMER

D EP20

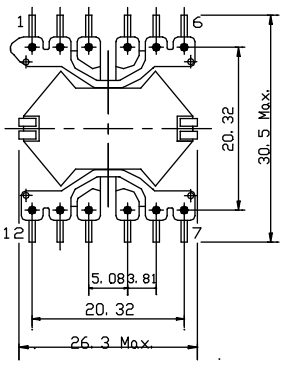


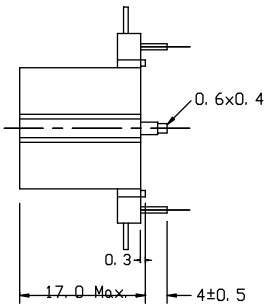


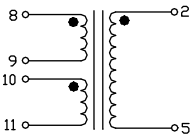


UNIT: mm

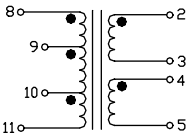
E RM8 DUAL







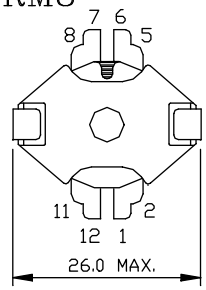
UT21910

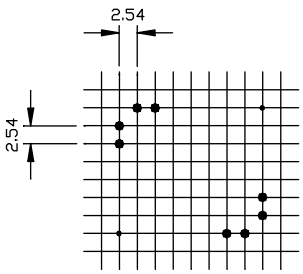


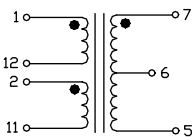
UT21917

UNIT: mm

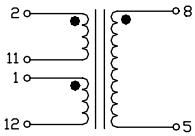
F RM8



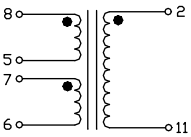




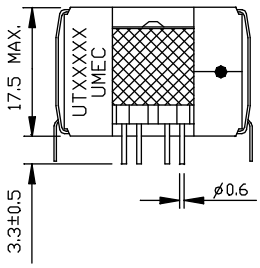
UT21905
UT21960



UT21924



UT21001
UT21942
UT21945
UT21954
UT21958
UT21959
UT21961

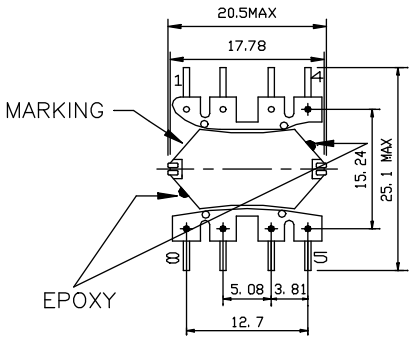


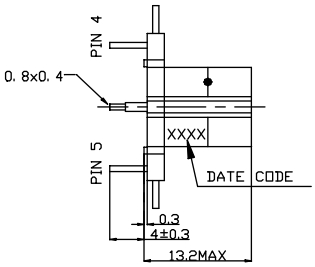
UNIT: mm

UNIVERSAL MICROELECTRONICS CO.,LTD. *3,27TH RD.,TAICHUNG INDUSTRIAL PARK,*
TEL:886-4-23590096 FAX:886-4-23590129 *TAICHUNG,TAIWAN,R.O.C*

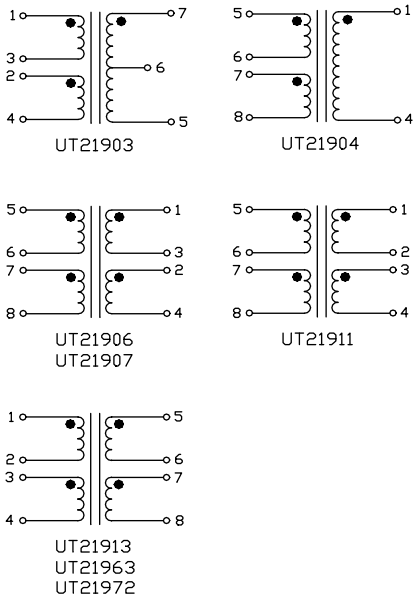
ISDN U_{KO}-INTERFACE TRANSFORMER

G RM6 DUAL

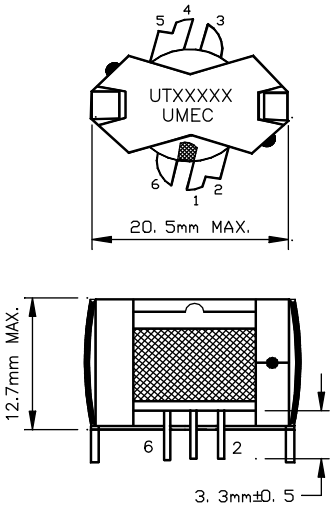


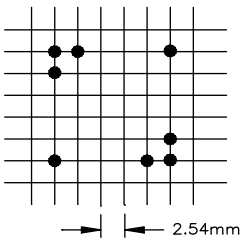


UNIT: ±0.2mm

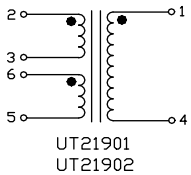


H RM6





UNIT: mm



UNIVERSAL MICROELECTRONICS CO.,LTD. *3,27TH RD.,TAICHUNG INDUSTRIAL PARK,*
TEL:886-4-23590096 FAX:886-4-23590129 *TAICHUNG,TAIWAN,R.O.C*