

ISDN U_{PO}-INTERFACE TRANSFORMER/MODULE

- The U_{PO}-interface is used to connect the PABX and terminal equipment(TE'S).
- The U_{PO}-interface that we can offer a wide range of magnetic component from which consumer can select the suitable type on the personal application.

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

chip manufacturer	chip designation	flat design	upright design	SMT design
Infineon (Siemens)	PEB2095	UT21128	UT21523	UT21128-TS
	PEB20950	UT21170	UT21599	UT21170-TS
	PEB2096 PEB2196	UT21120	UT21520	UT21120-TS
AMD	AM2095	UT21128	UT21523	UT21128-TS
	AM20950	UT21170	UT21599	UT21170-TS
National	TP3401	UT21171	UT21500	UT21171-TS
	TP3404	UT21153	UT21553	UT21153-TS

ISDN-IC/U_{PO}-Interface Module Selection

chip manufacturer	chip designation	through hole	SMT design
Infineon (Siemens)	PEB2095	UT21620	UT21620-TS
	PEB20950	UT21622 UT21614	UT21622-TS UT21614-TS
	AMD	UT21620	UT21620-TS
AMD	AM2095	UT21622	UT21622-TS
	AM20950	UT21614	UT21614-TS



ISDN U_{PO}-INTERFACE TRANSFORMER/MODULE^{*)}

electrical specifications @ 25°C:

Transformer

UMEC Model No.	n ±2%	I _{dc} mA	L _H mH Min.	L _S uH Max.	C _K pF Max.	R _{CU.IC} Ω NOM.	R _{CU.L} Ω NOM.	U _P KVrms	figure/ schematic
flat design									
UT21128	2.5:1:1	75	1.7	6	100	1.85	1.5	2.5	A
UT21170	2.5:1:1	100	1.7	6	140	3.8	3.2	2.5	A
UT21171	2:1:1	100	1.7	10	140	6.1	6.8	2.0	A
UT21153	2:1:1	75	1.7	6	70	1.5	1.5	2.0	A
UT21120	4:1:1	140	1.7	10	150	7.9	4.2	0.5	B
upright design									
UT21523	2.5:1:1	75	1.7	6	100	1.85	1.5	2.5	A
UT21599	2.5:1:1	100	1.7	6	140	3.8	3.2	2.5	A
UT21500	2:1:1	100	1.7	10	140	6.1	6.8	2.0	A
UT21553	2:1:1	75	1.7	6	70	1.5	1.5	2.0	A
UT21520	4:1:1	140	1.7	10	150	7.9	4.2	0.5	B
SMT design									
UT21128-TS	2.5:1:1	75	1.7	6	100	2.6	2.2	2.5	A
UT21170-TS	2.5:1:1	100	1.7	6	140	3.8	3.2	2.5	A
UT21171-TS	2:1:1	100	1.7	10	140	6.1	6.8	2.0	A
UT21153-TS	2:1:1	75	1.7	6	70	1.5	1.5	2.0	A
UT21120-TS	4:1:1	140	1.7	10	150	7.9	4.2	0.5	B

Module

UMEC Model No.	Transformer								Choke				figure/ schematic
	n ±2%	I _{dc} mA	L _H mH Min.	L _S uH Max.	C _K pF Max.	R _{CU.IC} Ω Nom.	R _{CU.L} Ω Nom.	U _P KVrms	L _N mH	L _S uH Max.	R _{CU} Ω Nom.	U _P KVrms	
through hole													
UT21620	2.5:1:1	75	1.7	6	100	1.85	1.5	2.5	2x6	0.5	≤0.85	0.5	A
UT21622	2.5:1:1	75	1.7	6	100	1.85	1.5	2.5	2x1.7	0.3	0.25	0.5	A
UT21614	2.5:1:1	100	1.7	6	140	3.8	3.2	2.5	2x6	0.5	≤0.85	0.5	A
SMT design													
UT21620-TS	2.5:1:1	75	1.7	6	100	1.85	1.5	2.5	2x6	0.5	≤0.85	0.5	A
UT21622-TS	2.5:1:1	75	1.7	6	100	1.85	1.5	2.5	2x1.7	0.3	0.25	0.5	A
UT21614-TS	2.5:1:1	100	1.7	6	140	3.8	3.2	2.5	2x6	0.5	≤0.85	0.5	A

*)Modules combine one Upo-transformer and one current compensated 2-fold choke.

*Specifications are subject to change without prior notice.

DATA SHEET 04-21 AUG./05
2 OF 4

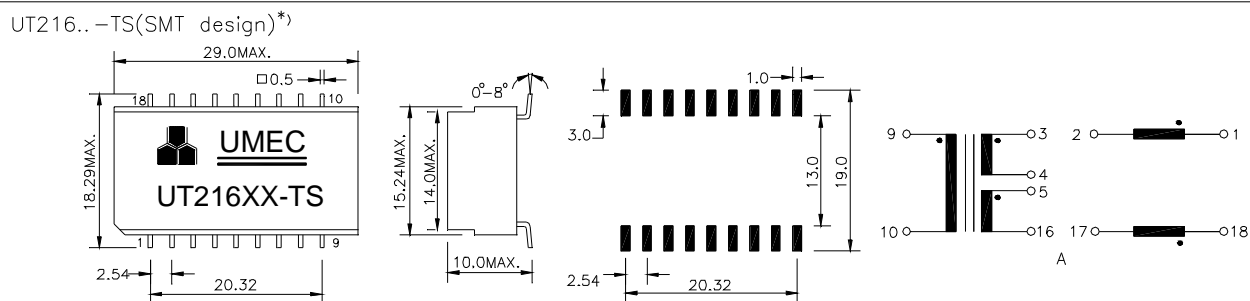
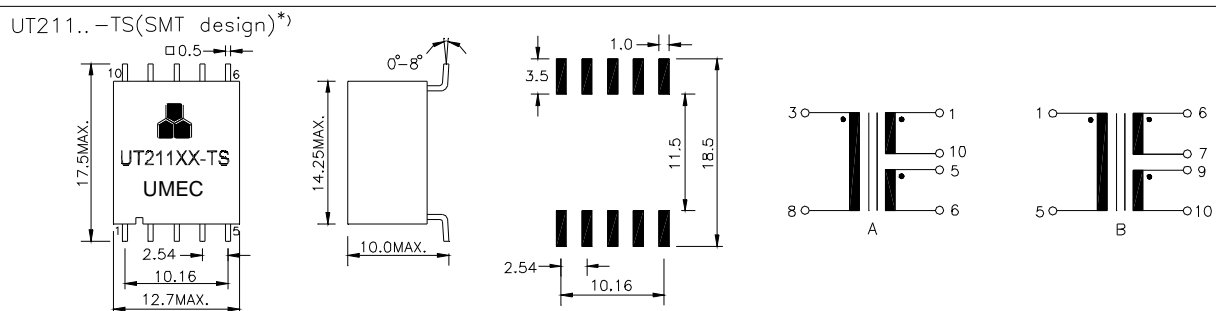
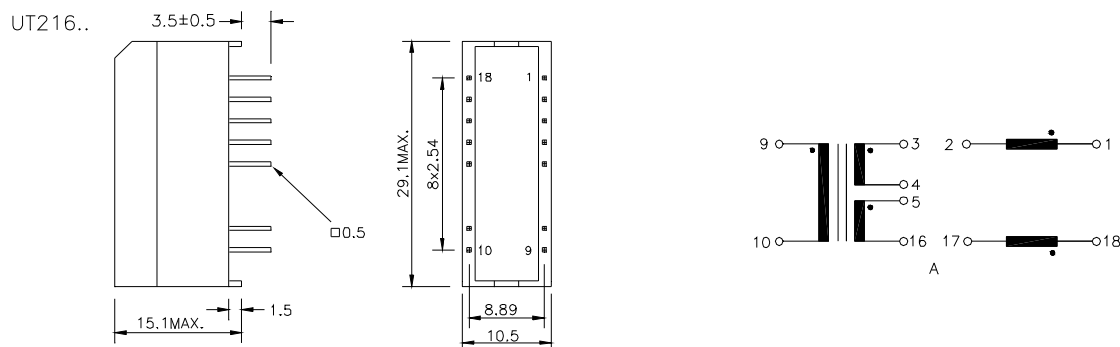
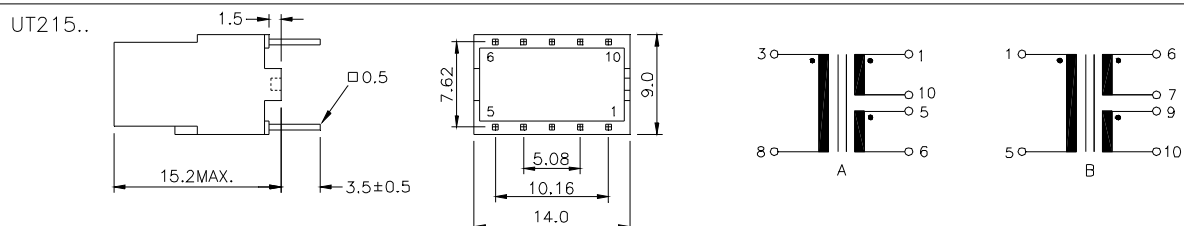
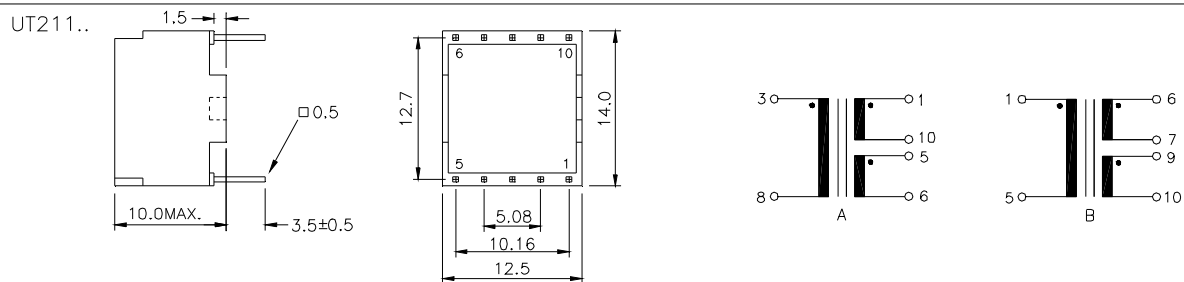


UNIVERSAL MICROELECTRONICS CO.,LTD.
TEL:886-4-23590096 FAX:886-4-23590129

3,27TH RD.,TAICHUNG INDUSTRIAL PARK,
TAICHUNG,TAIWAN,R.O.C

ISDN U_{PO}-INTERFACE TRANSFORMER/MODULE

Dimensions and connections (tolerance = ±0.2mm)



*) pin arrangement according to customer requirements.



ISDN U_{PO} -INTERFACE TRANSFORMER/MODULE

definition of symbols:

Transformer:

n = transformer ratio: IC-side:Line-side.

I_{dc} = max. permissible DC supply.

L_H = main inductance of winding(s) on Line-side(in series, $f=10\text{KHz}$ $U=100\text{mVrms}$).

L_S = leakage inductance of winding(s) on Line-side with winding(s) on IC-side short circuited(each in series, $f=100\text{KHz}$ $U=100\text{mVrms}$).

C_K = coupling capacitance between the winding(s) on IC-side and the winding(s) on Line-side(each in series, $f=10\text{KHz}$ $U=100\text{mVrms}$).

$R_{CU.IC}$ = DC resistance of the winding(s) on IC-side(in series, nominal value).

$R_{CU.L}$ = DC resistance of the winding(s) on Line-side(in series, nominal value).

U_P = test voltage, rms value 50/60Hz, 2seconds, winding(s) on Line-side to winding(s) on IC-side.

Choke:

L_N = rated inductance of a winding(tol. +50%/-30%, $f=10\text{KHz}$ $U=100\text{mVrms}$).

L_S = leakage inductance of winding when all other windings short circuited(nominal value, $f=100\text{KHz}$ $U=100\text{mVrms}$).

R_{CU} = DC resistance of each winding(nominal value).

U_P =test voltage, rms value 50/60Hz, 2seconds, winding to winding.

