

ISDN S_{2M}-INTERFACE TRANSFORMER/MODULE

- The S_{2M}-interface is used to connect the private buanch exchange(PBX) and network termination devices(NT'S).
- The S_{2M}-interface is a high transmission rate and a narrow pulse mask.
- The transmission pulse mask according to CCITT(ITU-T)I.430.

ISDN-IC/S_{2M}-Interface Transformer Selection

chip manufacturer	chip designation	flat design	upright design	SMT design	IEC 950 design
Infineon (Siemens)	PEB2235 PEB2236 PEB22320	UT21137 UT21141	UT21527 UT21556	UT21137-TS UT21141-TS	UT21704 UT21712 UT21713
	PEB2254	UT21190	UT21519	UT21190-TS	
Crystal	CS61574 CS6158 CS61534 CS61544	UT21137	UT21527	UT21137-TS	UT21763 UT21706
	CS61574A CS61575 CS6158A	UT21196	UT21581	UT21196-TS	
Dallas	DS2186	UT21137	UT21527	UT21137-TS	UT21713
	DS2187				UT21763 UT21706
Exar	T5620 T5650 T5664 T5675 T5681 T5683 T6165 T6181	UT21137	UT21527	UT21137-TS	UT21763
	T5684	UT21137	UT21527	UT21137-TS	UT21763 UT21713
Mitel	MH89750	UT21196	UT21581	UT21196-TS	UT21763
	MH89760 MH89780 MT8976 MT8978	UT21196	UT21581	UT21196-TS	UT21763
	MH89790 MT8979	UT21196	UT21581	UT21196-TS	UT21763
Rockwell	R8069A R8069 R8071	UT21137	UT21527	UT21137-TS	

ISDN S_{2M}-INTERFACE TRANSFORMER/MODULE

ISDN-IC/S_{2M}-Interface MODULE Selection

chip manufacturer	chip designation	through hole	SMT design
Infineon (Siemens)	PEB2254	UT21629	UT21629-TS
Dallas	DS2186	UT21629	UT21629-TS
Exar	T5684	UT21629	UT21629-TS

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ISDN S_{2M}-INTERFACE TRANSFORMER/MODULE

electrical specifications @ 25°C:

Transformer^{*)}

UMEC Model No.	n ±2%	L _H mH Min.	L _S uH Max.	R _{CU.IC} Ω Nom.	R _{CU.L} Ω Nom.	U _P KVrms	figure/schematic
flat design							
UT21137	1.5:1.5:1:1.5:1.5	5	1	0.41	0.3	2.0	B
UT21141	1:1:2	2	1	0.3	0.3	2.0	C
UT21190	1:1.41	4	1	0.3	0.5	2.0	D
UT21196	2/8/8/2:5/4/1	2	4	0.6	0.2	2.0	A
upright design							
UT21527	1.5:1.5:1:1.5:1.5	5	1	0.41	0.3	2.0	B
UT21556	1:1:2	2	1	0.3	0.3	2.0	C
UT21519	1:1.41	4	1	0.3	0.5	2.0	D
UT21581	2/8/8/2:5/4/1	2	4	0.6	0.2	2.0	A
SMT design							
UT21137-TS	1.5:1.5:1:1.5:1.5	5	1	0.41	0.3	2.0	B
UT21141-TS	1:1:2	2	1	0.3	0.3	2.0	C
UT21190-TS	1:1.41	4	1	0.3	0.5	2.0	D
UT21196-TS	2/8/8/2:5/4/1	2	4	0.6	0.2	2.0	A
IEC 950 design							
UT21762	1:1:1.2	2	5	0.8	0.35	4.0	A
UT21763	1:1:1	2	5	1.0	0.4	4.0	A
UT21764	2.5:2.5:1	2	5	2.4	0.4	4.0	A
UT21765	2:2:1	2.5	5	2.0	0.4	4.0	A
UT21766	1:1:2	2	5	0.6	0.4	4.0	A
UT21704	1:1:1.57	2	1	0.46	0.11	4.0	A
UT21706	1:1:1	12	5	1.40	0.25	4.0	A
UT21712	1:1:2	2	1	0.40	0.10	4.0	A
UT21713	1:1:2.67	3.5	1	0.40	0.13	4.0	A

*)Low cost design solution are available.

*Specifications are subject to change without prior notice.

ISDN S_{2M}-INTERFACE TRANSFORMER/MODULE

electrical specifications @ 25°C:

Module^{*)}

UMEC Model No.	n ±2%	L _H mH Min.	L _S uH Max.	R _{CU.IC} Ω Nom.	R _{CU.L} Ω Nom.	U _P KVrms	figure/ schematic
through hole ^{**)}							
UT21629	1:1.41	4	1	0.3	0.5	2.0	A
SMT design ^{**)}							
UT21629-TS	1:1.41	4	1	0.3	0.5	2.0	A

*)Modules combine two S_{2M}-transformers.

***)Low cost design solution are available.

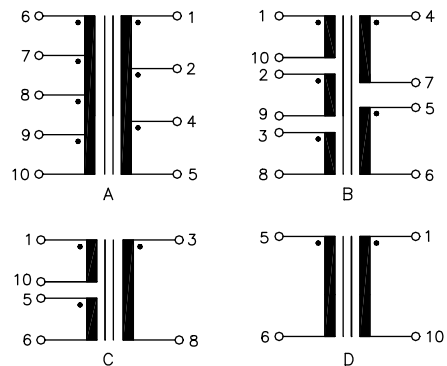
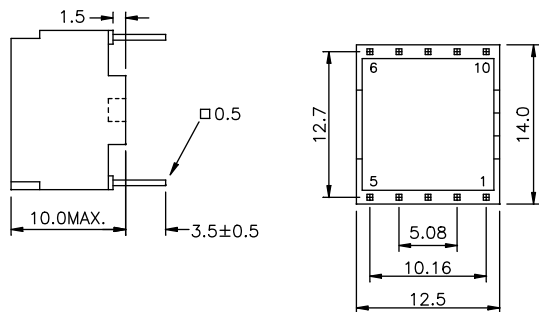
Specifications are subject to change without prior notice.



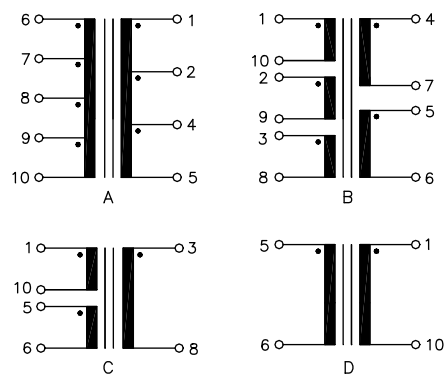
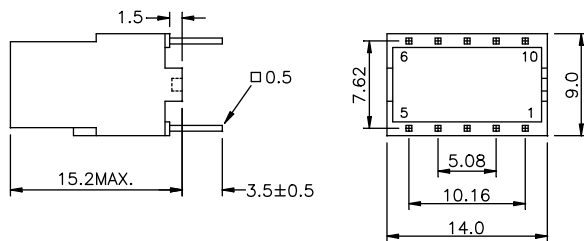
ISDN S_{2M}-INTERFACE TRANSFORMER

Dimensions and connections (tolerance = ±0.2mm)

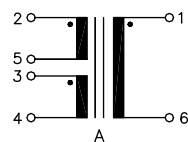
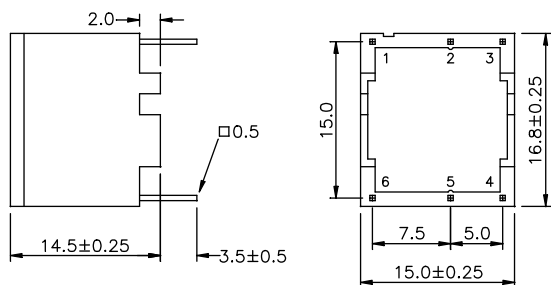
UT211..



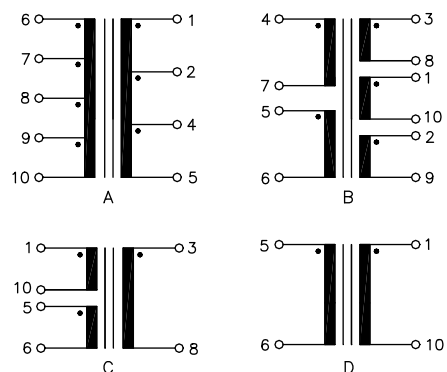
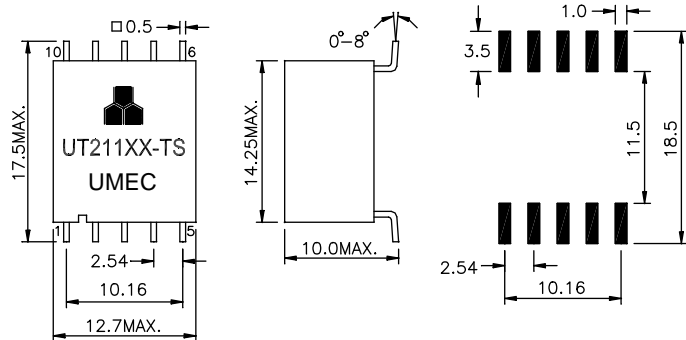
UT215..



UT217..



UT211..-TS (SMT design)*

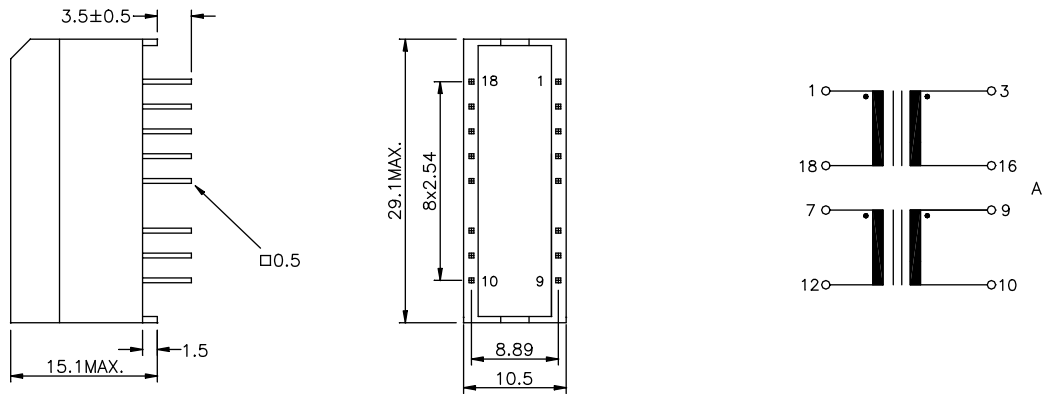


*) pins arrangement according to customer requirement.

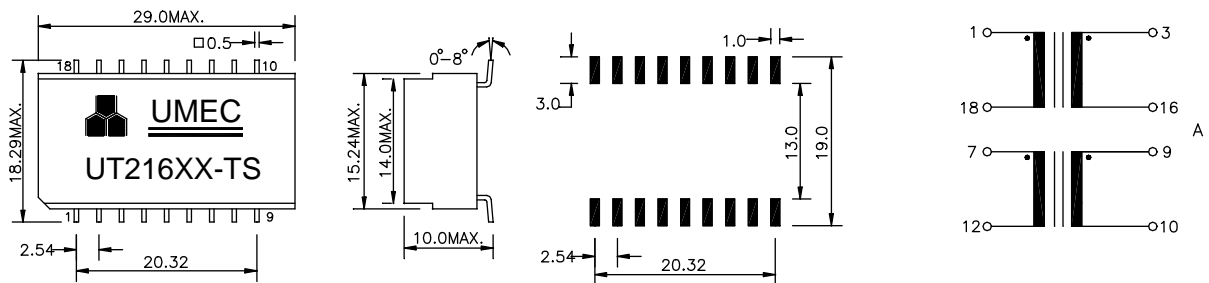
ISDN S_{2M}-INTERFACE MODULE

Dimensions and connections (tolerance = ±0.2mm)

UT216..



UT216..-TS(SMT design)*)



*) pins arrangement according to customer requirement.

ISDN S_{2M}-INTERFACE TRANSFORMER/MODULE

definition of symbols:

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

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

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

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.