

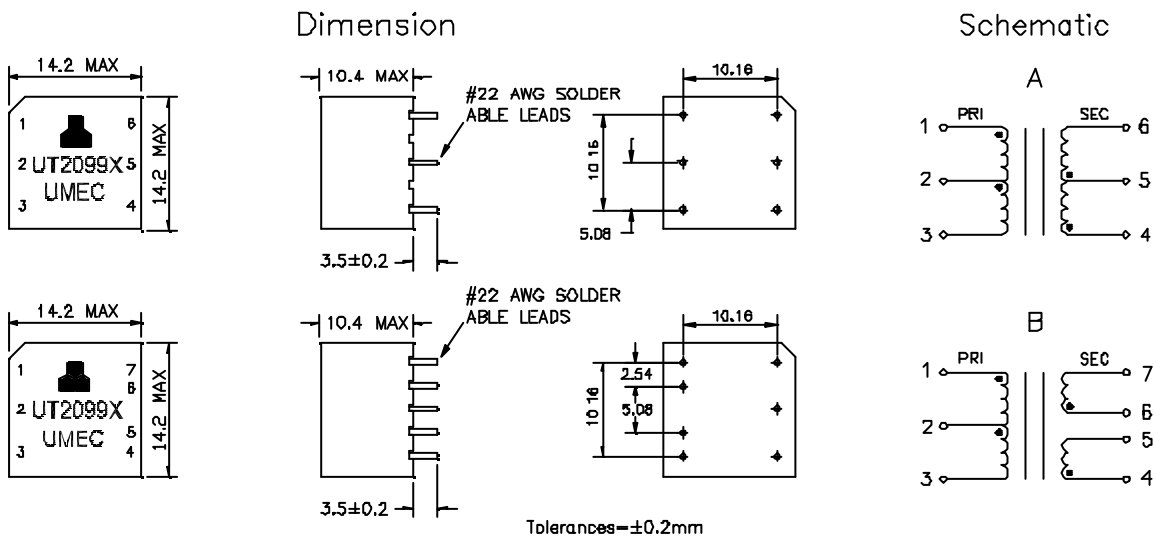
ISDN S-Interface Isolation Transformers

- Provides isolation for line card and terminal.
- Meets pulse waveform template of CCITT 1.430 when recommended transformer and chip pair is used.
- 2.0KVrms 4.0KVrms hi-pot pri/sec in conformance with international safety standards.(UL60950-1,IEC60950-1 Requirements)
- 60dB Min. longitu-dinal balance 10KHz-300KHz
- A minimum value that decreases at the rate of 20dB per octave between 300KHz and 1 MHz

ELECTRICAL SPECIFICATIONS @25°C

Model No.	Turns Ratio (±2%)	Primary Sine Wave OCL (mH Min.)	Pri/Sec Leakage Inductance (μ H Max)	Pri/sec C w/w (pF Max)	Primary DCR (ohms±15%)	Secondary DCR (ohms±15%)	Hi-pot (Vrms)	Package Schematic
UT20993	1:1	22	5	130	2.4	2.4	2000	A
UT20994	1:1.8	22	10	120	2.4	4.6	2000	B
UT20995	1:2	22	10	120	2.4[2.7*]	4.8	2000	A
UT20996	1:2.5	22	12	125	2.4	5.8	2000	B
UT20998	1:2.5	22	12	125	2.4[2.8*]	5.8	2000	C
UT20999	1:2	22	11	120	2.4	4.8	2000	A
UT20393	1:1	22	5	130	2.4	2.4	2000	D
UT20394	1:1.8	22	10	120	2.4	4.6	2000	D
UT20395	1:2	22	10	120	2.4	4.8	2000	D
UT20396	1:2.5	22	12	125	2.4	5.8	2000	D
UT20399	1:2	22	11	120	2.4	4.8	2000	D
UT20693	1:1	22	5	130	0.6	2.6	4000	D
UT20694	1:1.8	22	10	120	0.6	4.6	4000	D
UT20695	1:2	22	10	120	0.6	5.0	4000	D
UT20696	1:2.5	22	12	125	0.6	6.25	4000	D
UT20699	1:2	22	11	120	0.75	5.0	4000	D

*) DUAL SMT TYPE TRANSFORMER'S DCR VALUE



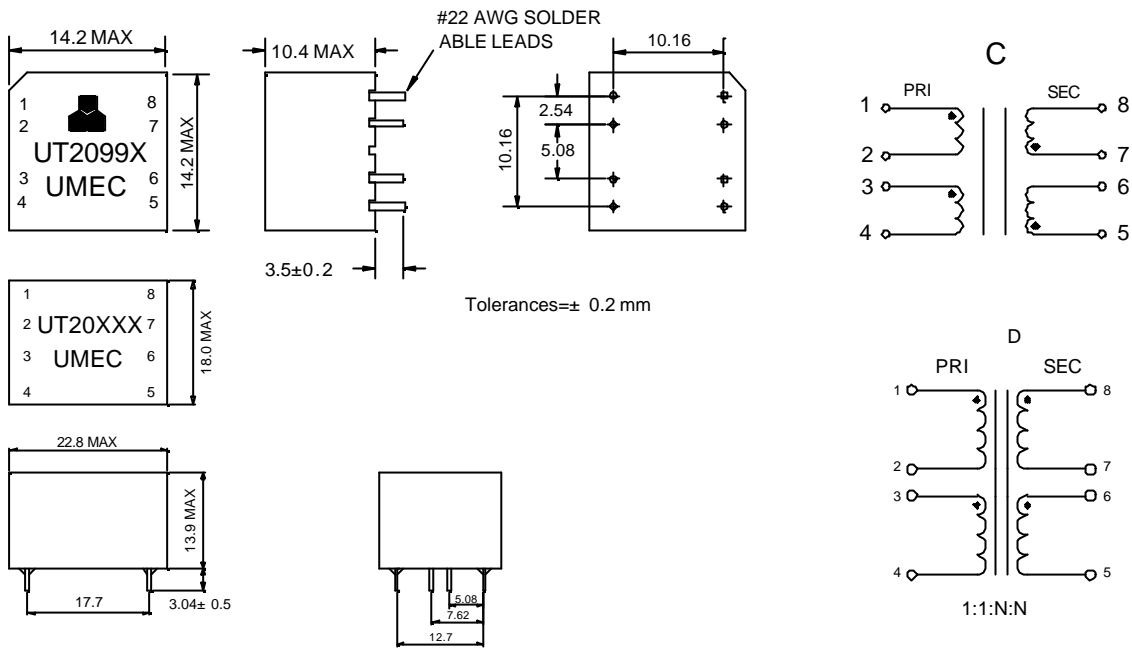
DATA SHEET 04-20 SEP./06
1 OF 3



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

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

ISDN S-Interface Isolation Transformer

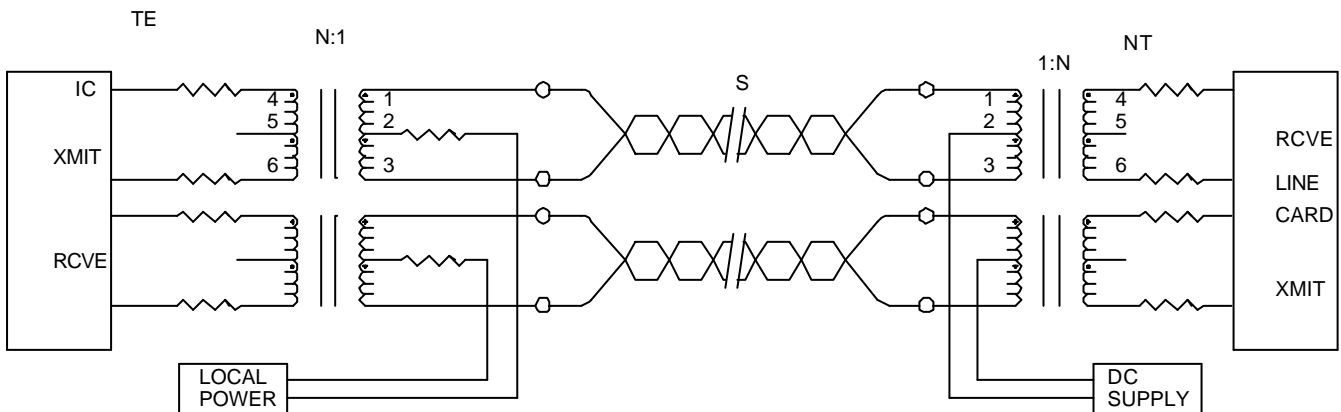


APPLICATION

The S-Interface is the standardized four-wire digital telephone access point defined by the CCITT 1-series recommendations for the integrated services digital network. This "basic rate access" accommodates two 64 Kbps "B-channels" for information, one 16 Kbps "D-channel" intended for signaling and control, and 48 Kbps for framing and other purposes, giving a total rate of 192 Kbps. The CCITT physical layer recommends that the user network interface be transformer coupled. A typical application circuit is presented below.

The transformer provides isolation for the line card or the terminal from the line; it is also a way to provide phantom power feeding to the terminal over the S-loop. Each end requires a transmit and a receive transformer. The minimum primary inductance and the maximum distributed capacitance satisfy the transmitter output and receiver input impedance requirements of CCITT 1.430 for both the TE and the NT the maximum distributed capacitance allows sufficient margin for the capacitance of the driver IC and a protection diode network. This is consistent with the overall maximum value specified and the permitted length of the basic access TE cord.

TYPICAL APPLICATION CIRCUIT



DATA SHEET 04-20 SEP./06
2 OF 3



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